

RAJPUTANA GAZETTEERS.

VOLUME III-A.

THE WESTERN RAJPUTANA STATES RESIDENCY

AND

THE BIKANER AGENCY,

TEXT

COMPILED BY MAJOR K. D. ERSKINE, I.A., C.I.E.



ALLAHABAD:
THE PIONEER PRESS.

1909.

PREFACE.

The earlier Gazetteers of these States, namely those of Jaisalmer and Jodhpur written by the late Colonel Walter, that of Sirohi by the late Colonel Baylay, and that of Bikaner by Captain (now Colonel) Powlett, form the basis of this volume. I have also quoted freely from that well-known book "*The Annals and Antiquities of Rajasthan*," which was written by the late Lieutenant-Colonel James Tod, whose intimate knowledge of Rajputana has never been equalled, and which, in the words of Sir Alfred Lyall, is "perhaps the most valuable and exhaustive special study of Indian history and manners that has ever been produced."

As elsewhere in the Province, the Darbars very kindly deputed one or more officials to collect all available information for me under certain prescribed heads, and my thanks are due to the following gentlemen for much help rendered in the earlier stages :—Rao Sahib Lakshmi Das Sapat, Diwan of Jaisalmer; Mr. Kesar Ram Bhatji, Professor at the Jaswant College, Jodhpur; the late Maulvi Muhammad Nur-ul-Hasan, who was at first Judicial Officer and subsequently Diwan of Sirohi; and Babus Sheo Govind Singh and Sheo Gulam of Bikaner, the former being the Head-Master of the Nobles' School, and the latter the Superintendent of the Mahakma Khas Office. Pandit Gauri Shankar, whom I mentioned in the preface to Vol. II-A of this series, and who has quite recently been put in charge of the new Museum at Ajmer, assisted me with the historical portion of both the Jaisalmer and Sirohi Gazetteers, and I desire again to thank him. Lastly, I am particularly indebted to Rao Bahadur Pandit Sukhdeo Prasad, C.I.E., of Jodhpur, for valuable notes on a variety of subjects; no one could have had a more able or more willing coadjutor.

CONTENTS.

	PAGE.
THE WESTERN RAJPUTANA STATES RESIDENCY	1

PART I.—JAISALMER STATE.

CHAPTER I.—*Physical Aspects.*

Position, area and boundaries	5
Configuration	"
Rivers	6
Geology and botany	"
Fauna	7
Climate and temperature	"
Rainfall	8

CHAPTER II.—*History.*

Early history	9
The Bhātis migrate to the desert	10
Rāwal Deorāj (tenth century)	"
" Jaisal founds the fort and town of Jaisalmer (about 1156)	11
Climate and rainfall (1276—94)	12
Rainfall ... Tumāyūn (1541)	13
" Akbar and Jahāngir)	"
"	"
"	14

CHAPTER II.—*History.*

Genealogy of ruling family	"
Early history	15
Migration from the Deccan to Kanauj	"
The Gaharwār dynasty of Kanauj	16
Migration to Rājputāna	"
Rao Chonda captures Mandor from the Parihār Rājputs and...	17
his capital (1381)	"

CHAPTER III.—*The People.*

PAGE.

Population in 1881, 1891 and 1901	...	...	...	...	18
Density	...	...	...	...	"
Towns and villages	...	...	...	...	"
Migration	...	...	...	...	"
Vital statistics ; diseases and infirmities	...	...	...	...	19
Sex and age	...	...	...	...	"
Civil condition	...	...	...	...	20
Language	...	...	...	...	"
Castes, tribes, etc. :—	...	...	...	...	"
(a) Rājputs	...	...	...	...	21
(b) Chamārs, Sheikhs, Mahājans and Brāhmins	...	...	...	...	"
Religions	...	...	...	...	"
Occupations	...	...	...	...	"
Food, dress and dwellings	...	...	...	...	22
Disposal of dead	...	...	...	...	"
Games and amusements	...	...	...	...	"
Nomenclature	...	...	...	...	"

CHAPTER IV.—*Economic.*

	PAGE.
Land revenue :—	
General system	33
Tenures	"
Miscellaneous revenue	34
Public Works	"
Army and police ; jails	35
Education	"
Medical :—	
Hospitals	36
Lunatic asylum	"
Vaccination	"
Sale of quinine	"
Surveys	"

CHAPTER VI.—*Miscellaneous*

Jaisalmer town	37
<i>Bibliography</i>	39

PART II.—JODHPUR STATE.

CHAPTER I.—*Physical Aspects*

Area, position and boundaries	43
Meaning of word "Mārwar"	"
Configuration	"
Hill system	44
River "	"
Lakes	47
Geology	"
Botany	48
Fauna	50
Climate and temperature	"
Rainfall	51

CHAPTER II.—*History.*

Genealogy of ruling family	52
Early history	"
Migration from the Deccan to Kanauj	"
The Gaharwār dynasty of Kanauj	53
Migration to Rājputāna	"
Rao Chonda captures Mandor from the Parihār Rājputs and makes it his capital (1381)	54,

	PAGE
Rao Jodha (1444—88) ...	54
Jodhpur city founded (1459) ...	55
Rao Mādeo (1532—62 or 69) ...	"
Rājā Udai Singh (1581—95) ...	58
" Sūr Singh (1595-1620) ...	59
" Gaj Singh (1620—38) ...	"
Mahārājā Jaswant Singh I (1638—78)...	"
The battle of Fatehābād, near Ujjain (1658) ...	60
Mahārājā Ajit Singh (1679—1724) ...	62
" Abhai Singh (1724—50) ...	65
" Rām Singh (1750—52) ...	66
" Bakht Singh (1762—53) ...	"
" Bijai Singh (1753—93) ...	"
The first battle of Merta (1756) ...	66
The Marāthās appear on the scene ...	68
Sindhia defeated in the battle of Tonga (1787), but is subsequently successful at Pātan and Merta (1790) ...	"
The battle of Pātan in the Jaipur State (June 1790) ...	"
" " " Merta (September 1790) ...	69
Mahārājā Bhīm Singh (1793-1803) ...	70
" Mān Singh (1803-43) ...	"
Amir Khān gains a footing ...	71
Treaty with the British Government (1818) ...	"
Misgovernment of Mān Singh ...	72
Mahārājā Takht Singh (1843-73) ...	73
" Jaswant Singh II (1873-95) ...	74
" Sardār Singh (1895 to date)...	76
Archæology ...	"

CHAPTER III.—*The People.*

Population in 1881, 1891 and 1901 ...	77
Density ...	"
Towns and villages ...	78
Migration ...	"
Vital statistics ...	79
Diseases ...	80
Infirmities ...	81
Sex ...	"
Civil condition ...	82
Language ...	"
Castes, tribes, etc. —	
(a) Jāts ...	83
(b) Brāhmans ...	84
(c) Rājputs ...	85
(d) Mahājans ...	86

Castes, tribes, etc.—(contd.)

(e) Balais or Bhāmbis ...	...	...	...	...	87
(f) Rebāris or Rāikās ...	...	...	...	...	88
(g) Mālis ...	...	...	...	...	"
(h) Chākars ...	...	...	...	...	"
(i) Kumbhārs...	...	...	...	...	89
(j) Bhils ...	...	...	...	...	90
(k) Bishnois...	...	...	...	...	"
(l) Sirvis ...	...	...	...	...	91
(m) Khātis and Nais ...	...	...	...	...	"

Religions :—

(a) Hindus ...	...	...	...	...	"
(b) Musalmāns ...	...	...	...	...	92
(c) Jains ...	...	...	...	...	"
(d) Animists ...	...	...	...	...	"
(e) Christians ...	...	...	...	...	"

Occupations ...	...	...	...	...	93
Food ...	...	...	...	...	"
Dress ...	...	...	...	...	94
Dwellings ...	...	...	...	...	96
Disposal of dead ...	...	...	...	...	"
Amusements ...	...	...	...	...	"
Festivals ...	...	...	...	...	97
Nomenclature ...	...	...	...	...	"

CHAPTER IV.—Agriculture.

General conditions ...	...	...	...	...	99
Soil classification ...	...	...	...	...	"
System of cultivation ...	...	...	...	...	100
Agricultural population ...	...	...	...	...	"
The two crop-growing seasons ...	...	...	...	...	101
Agricultural statistics ...	...	...	...	...	"
Principal crops :—					
(a) Bājra ...	...	...	...	...	102
(b) Jowār ...	...	...	...	...	"
(c) Wheat ...	...	...	...	...	"
(d) Barley ...	...	...	...	...	103
(e) Gram ...	...	...	...	...	"
(f) Maize ...	...	...	...	...	"
(g) Other millets and pulses ...	...	...	...	...	"
(h) Oil-seeds ...	...	...	...	...	"
(i) Fibres ...	...	...	...	...	104
(j) Drugs and stimulants ...	...	...	...	...	"
Fruit and vegetable production ...	...	...	...	...	"
Agricultural implements ...	...	...	...	...	"
Loans to agriculturists ...	...	...	...	...	105

	PAGE.
Indebtedness	105
Live stock	106
Pasture grounds... ..	"
Fairs	107
Diseases of cattle, camels, etc.	"
Irrigation	"
Wells... ..	108
Tanks... ..	109

CHAPTER V.—*Rents, Wages and Prices.*

Rents	110
Wages	"
Prices... ..	111
Material condition of the people	"

CHAPTER VI.—*Forests, Mines and Minerals.*

Forests:—

Area and position	113
Soil and forest growth	"
History	"
Control and management...	114
Statistics of produce and revenue	"
Fuel and fodder reserves...	"

Minerals:—

Salt... ..	115
Marble	"
Sandstone	"
Gypsum and selenite	116
Fullers' earth	"
Miscellaneous	"

CHAPTER VII.—*Arts and Manufactures; Commerce and Trade.*

Arts and manufactures	117
Commerce and trade:—	
Former trade	118
Growth of trade	"
General character of trade	119
Exports and imports	"
Trade centres, etc.	"

✓ CHAPTER VIII.—*Communications.*

PAGE.

Railways:—

(a) The Rājputāna-Mālwa line	...	...	...	...	120
(b) The Jodhpur-Bikaner line	...	...	...	...	"
(c) Projected lines	...	...	...	...	121
(d) Influence of railways	...	...	...	...	"
Roads...	...	...	...	...	122
Tramways	...	...	...	...	"
Conveyances	...	...	...	...	"
Post and telegraph offices	...	...	...	...	123

✓ CHAPTER IX.—*Famines.*

Causes and general conditions	...	...	...	...	124
Warnings	...	...	...	...	"
Early famines	...	...	...	...	125
Famine of 1868-69	...	...	...	...	"
" " 1877-78	...	...	...	...	126
" " 1891-92	...	...	...	...	"
" " 1899-1900	...	...	...	...	127
Scarcity of 1901-02	...	...	...	...	128
Scarcities of 1904-05 and 1905-06	...	...	...	...	"
Protective measures	...	...	...	...	129

✓ CHAPTER X.—*Administration.*

Form of government	...	...	...	...	130
Administrative divisions	...	...	...	...	"
The tract known as Mārwar-Merwāra...	...	...	...	...	"

✓ CHAPTER XI.—*Legislation and Justice.*

Administration of justice in former times	...	...	...	...	132
State of affairs in 1839-40	...	...	...	...	"
Improvements effected since 1876	...	...	...	...	133
Legislative enactments	...	...	...	...	134
Various courts	...	...	...	...	135
State "	...	...	...	...	136
British "	...	...	...	...	138
Interstatal courts	...	...	...	...	139
Registration	...	...	...	...	"

CHAPTER XII.—*Finance.*

Revenue in former times	...	...	...	...	140
Receipts and expenditure during recent years	...	...	...	...	"
Past and present methods of taxation	...	...	...	...	"
System of account and control	...	...	...	...	141
Financial position	...	...	...	...	142
Coinage	...	...	...	...	"

CHAPTER XIII.—*Land Revenue and Tenures.*

PAGE.

Tenures :—

(a) <i>Jāgīr</i> ...	...	...	...	...	145
(b) <i>Jāna jāgīr</i> ...	...	...	...	...	146
(c) <i>Jivka</i> ...	...	...	...	...	"
(d) <i>Sāsan and dohli</i> ...	...	...	...	...	"
(e) <i>Bhūm</i> ...	...	...	...	...	"
(f) <i>Bhūmi-chāra</i> ...	...	...	...	...	"
(g) <i>Dūmba</i> ...	...	...	...	...	"
(h) <i>Inām</i> ...	...	...	...	...	147
(i) <i>Pasaita</i> ...	...	...	...	...	"
(j) <i>Nānkār</i> ...	...	...	...	...	"
Cultivating tenures ...	...	...	...	...	"
System of collection of revenue ...	...	...	...	...	"
Settlement of 1891-96 ...	...	...	...	...	148

CHAPTER XIV.—*Miscellaneous Revenue.*

Opium ...	...	...	...	...	150
Salt ...	...	...	...	...	"
Excise :—					
Country liquor...	...	...	...	...	152
Drugs ...	...	...	...	...	"
Foreign liquor...	...	...	...	...	"
Stamps ...	...	...	...	...	"

CHAPTER XV.—*Local and Municipal.*

The Jodhpur municipality ...	...	...	...	...	154
The conservancy tramway at Jodhpur ...	...	...	...	...	"
Sanitary arrangements at Pāli and Bilāra ...	...	...	...	...	155

CHAPTER XVI.—*Public Works.*

History of the department ...	...	...	...	...	156
Expenditure ...	...	...	...	...	"
Principal works ...	...	...	...	...	"

CHAPTER XVII.—*Army.*

Present strength and cost ...	...	...	...	...	158
Imperial Service troops ...	...	...	...	...	"
Local force ...	...	...	...	...	160
<i>Jāgīr</i> militia ...	...	...	...	...	"
Troops of the Indian Army ...	...	...	...	...	"

✓ CHAPTER XVIII.—*Police and Jails.*

PAGE.

Police :—

Former arrangements	...	...	...	...	160
Present	"	...	...	...	"
Jāgir police	...	...	...	...	"
Village	"	...	...	...	161
Railway	"	...	...	...	"
Working of State police	...	...	...	...	"
Dacoities, etc.	...	...	...	...	162
Criminal tribes	...	...	...	...	"

Jails :—

In former times	...	...	...	...	163
The present Central Jail	...	...	...	...	164
Prisons in the districts	...	...	...	...	165

✓ CHAPTER XIX.—*Education.*

Literacy of population	...	...	...	...	166
Early history	...	...	...	...	"
Progress since 1882	...	...	...	...	167
Schools and scholars in September 1906	...	...	...	...	168
State schools	...	...	...	...	"
Private	"	...	...	...	169
Castes of students	...	...	...	...	"
Fees	...	...	...	...	171
Successes at public examinations	...	...	...	...	"
Newspapers	...	...	...	...	"

CHAPTER XX.—*Medical.*

History	...	...	...	...	172
Management and expenditure	...	...	...	...	173
Noteworthy institutions :—					
(a) The Hewson Hospital	...	...	...	...	"
(b) " Jaswant "	...	...	...	...	"
(c) " Mission "	...	...	...	...	"
Lunatic asylum	...	...	...	...	174
Leper	"	...	...	...	"
Vaccination	...	...	...	...	"
Sale of quinine	...	...	...	...	175

CHAPTER XXI.—*Surveys.*

Topographical survey of 1865—91	...	...	...	...	176
Trigonometrical	"	"	1872—74	...	"
Local	"	"	1893—93	...	"

CHAPTER XXII.—*Miscellaneous.*

	PAGE.
Bāli <i>hukūmat</i> ...	177
Bāli town ...	178
Bilāra <i>hukūmat</i> ...	"
Bilāra town ...	179
Pipār " ...	"
Desuri <i>hukūmat</i> ...	180
Nādoi village ...	181
Rānāpur " ...	182
Sādri town ...	183
Didwāna <i>hukūmat</i> ...	"
Didwāna town ...	184
Jaitāran <i>hukūmat</i> ...	186
Agewa estate ...	"
Jaitāran town ...	"
Nimāj estate ...	187
Raipur ...	"
Rās ...	"
Jālōr <i>hukūmat</i> ...	188
Bhadrājan estate ...	"
Jālōr town ...	189
Jaswantpura <i>hukūmat</i> ...	190
Bhīmāl town ...	191
Jodhpur <i>hukūmat</i> ...	"
Asop estate ...	193
Jodhpur city ...	"
Mandor town ...	196
Mallani <i>hukūmat</i> ...	198
Bārmer estate and town ...	201
Jasol " ...	202
Mārot <i>hukūmat</i> ...	"
Merta " ...	"
Alniawās estate ...	203
Merta town ...	"
Rinn estate ...	204
Nāgaur <i>hukūmat</i> ...	205
Mūndwa town ...	206
Nāgaur " ...	"
Pachbhādra <i>hukūmat</i> ...	207
Bālotra town ...	208
Pachbhādra town ...	"
Pāli <i>hukūmat</i> ...	210
Kharwā estate ...	"
Pāli town ...	"
Parbatsar <i>hukūmat</i> ...	211
Phalodi " ...	213
Lohāwat town ...	"
Phalodi ...	"

	PAGE.
Sāmbhar <i>hukūmat</i>	214
Kuchāwan estate	"
Nāwa town	215
Sāmbhar town and lake	"
Sānchor <i>hukūmat</i>	218
Sānkra "	"
Pokaran estate... ..	219
Sheo <i>hukūmat</i>	"
Shergarh "	220
Siwāna "	"
Sojat "	221
Awā estate	222
Kantālia "	"
Sojat town	223
<i>Bibliography</i>	224

PART III.—SIROHI STATE.

CHAPTER I.—*Physical Aspects.*

Position, area and boundaries	229
Origin of name	"
Configuration	"
Hill system	"
River "	"
Lakes	231
Geology and botany	232
Fauna	233
Climate and temperature	234
Rainfall	"
Earthquakes and floods	235

CHAPTER II.—*History.*

Genealogy	236
Early history of the Chauhāns	"
Deorāj, the founder of the Deora sept of Chauhāns	238
Rao Lūmbha (fourteenth century)	"
Sirohi town founded (1425)	239
Rao Lākha (fifteenth century)	"
" Sūrthan (died in 1610—11 or 1622)	240
" Akhai Rāj II (died in 1673)	242
" Mān Singh III (1705—4)	243

	PAGE.
Rao Udai Bhān (1808—16)	242
„ Sheo Singh (1816—62)	24
Treaty with the British Government (1823)	„
Rao Umed Singh (1862—75)	24
Rao (afterwards Mahārāo) Kesri Singh (1875 to date)	24
<i>Archæology</i>	24

CHAPTER III.—*The People.*

Population in 1881, 1891 and 1901	250
Density	„
Towns and villages	„
Migration	251
Vital statistics	„
Diseases and infirmities	252
Sex and age	253
Civil condition	„
Language	254
Castes, tribes, etc. :—	
(a) Mahājans	„
(b) Rājputs	„
(c) Dheds	„
(d) Rebāris	„
(e) Bhils	„
(f) Girāsias	255
Religious	„
Occupations	256
Food, dress and dwellings	„
Disposal of dead	257
Amusements and festivals	„
Nomenclature	258

CHAPTER IV.—*Economic.*

Agriculture :—

General conditions	259
Soil classification	„
System of cultivation	„
Agricultural population	260
„ statistics	„
The two crop-growing seasons	„
<i>Kharif</i> and <i>rabi</i> crops	261
Vegetables and fruits	„
Loans to agriculturists	262
Live stock	„
Irrigation	„

Rents and wages ...	...	...	...	...	...	263
Prices ...	...	...	...	...	...	264
Forests ...	...	...	...	...	...	"
Minerals ...	...	...	...	...	...	265
Arts and manufactures ...	...	...	...	...	...	"
Commerce and trade ...	...	...	...	...	...	266
Means of communication :—						
Railways ...	...	...	...	...	...	267
Roads ...	...	...	...	...	...	268
Post offices ...	...	...	...	...	...	"
Telegraph offices ...	...	...	...	...	...	269
Famines ...	...	...	...	...	...	"

CHAPTER V.—Administrative.

Form of government and administrative divisions ...	...	...	...	...	...	272
Civil and criminal justice ...	...	...	...	...	...	"
Finance :—						
In former times ...	...	...	...	...	...	274
Present revenue and expenditure ...	...	...	...	...	...	"
Financial position ...	...	...	...	...	...	275
Coinage ...	...	...	...	...	...	"
Land revenue :—						
Tenures ...	...	...	...	...	...	276
Mode of assessment and collection ...	...	...	...	...	...	277
Miscellaneous revenue ...	...	...	...	...	...	"
Municipal ...	...	...	...	...	...	278
Public Works ...	...	...	...	...	...	279
Army ...	...	...	...	...	...	"
Police... ...	...	...	...	...	...	280
Jails ...	...	...	...	...	...	281
Education ...	...	...	...	...	...	"
Medical :—						
Hospitals ...	...	...	...	...	...	282
Vaccination ...	...	...	...	...	...	283
Sale of quinine ...	...	...	...	...	...	"
Surveys ...	...	...	...	...	...	"

CHAPTER VI.—Miscellaneous.

Abu ...	...	...	...	...	...	284
Abu Road ...	...	...	...	...	...	297
Chandrāvati ...	...	...	...	...	...	298
Erinpura ...	...	...	...	...	...	299
Sheoganj ...	...	...	...	...	...	301
Sirohi town ...	...	...	...	...	...	"
Vasantgarh ...	...	...	...	...	...	302
<i>Bibliography</i> ...	...	...	...	...	...	305

CHAPTER IV.—BIKANER STATE.

CHAPTER I.—*Physical Aspects.*

	PAGE.
Position, area and boundaries	309
Derivation of name	"
Configuration and hill system	"
River system	"
Lakes...	310
Geology and botany	"
Fauna	311
Climate and temperature	312
Rainfall	313
Earthquakes and storms	"

CHAPTER II.—*History.*

Genealogy	314
Rao Bika (1465-1504)	"
Bikaner city founded (1488)	315
Rao Lunkaran (1504-26)	316
" Jet Singh (1526-41)	"
" Kalyān Singh (1541-71)	"
" (afterwards Rājā) Rai Singh (1571-1611)	317
Rājā Delpat Singh (1611-13)	319
" Sūr Singh (1613-31)	320
" Karan Singh (1631-69)	"
" (afterwards Mahārājā) Anūp Singh (1669-98)	322
Mahārājā Sarūp Singh (1698-1700)	"
" Sūjān Singh (1700-35)	"
" Zorāwar Singh (1735-45)	323
" Gaj Singh (1745-88)	"
" Sūrat Singh (1788-1828)	325
Treaty with the British Government (1818)	326
Mahārājā Ratan Singh (1828-51)	"
" Sardār Singh (1851-72)	327
" Dūngar Singh (1872-87)	328
" Ganga Singh (1887 to date)	329
Archæology	330

CHAPTER III.—*The People.*

Population in 1881, 1891 and 1901	331
Density	"
Towns and villages	"
Migration	332
Vital statistics	"

	PAGE.
Diseases and infirmities	393
Sex and age	"
Civil condition	334
Language	335
Castes, tribes, etc. :—	
(a) Jāts	"
(b) Brāhmans	"
(c) Chamārs...	"
(d) Mahājans	336
(e) Rājputs	"
(f) Rāths	"
(g) Kumbhārs	"
(h) Thoris	"
(i) Nais and Khātis	337
Religions	"
The Alakhgirs	"
Occupations	338
Food and dress	"
Dwellings	339
Disposal of dead...	"
Amusements and festivals	"
Nomenclature	"

CHAPTER IV.—*Economic.*

Agriculture :—

General conditions	341
System of cultivation	342
Agricultural population	"
The two harvests	343
Agricultural statistics	"
Various crops	"
Fruits and vegetables	344
Agricultural loans	345
Indebtedness of cultivators	"
Live stock	"
Fairs	346
Irrigation	"
The Ghaggar canals	"
Rents, wages and prices	348
Mines and minerals	349
Manufactures	351
Commerce and trade	"
Means of communication :—	
Railways	353
Roads	"
Post and telegraph offices	354
Famines	"

CHAPTER V.—*Administrative.*

PAGE.

Administration ...	...	...	...	...	357
Civil and criminal justice ...	...	...	...	...	"
Finance :—					
In former times ...	...	...	...	...	359
Present revenue and expenditure ...	...	...	...	...	361
Financial position ...	...	...	...	...	"
Coinage ...	...	...	...	...	"
Land revenue :—					
Tenures ...	...	...	...	...	362
Revenue-free estates ...	...	...	...	...	363
<i>Pattā</i> ...	...	...	...	...	"
Cultivating tenures ...	...	...	...	...	364
Methods of assessment ...	...	...	...	...	365
Settlement of 1894-95 ...	...	...	...	...	366
The Tibi villages ...	...	...	...	...	367
Miscellaneous revenue ...	...	...	...	...	368
Municipal ...	...	...	...	...	369
Public Works ...	...	...	...	...	370
Army ...	...	...	...	...	371
Police, ...	...	...	...	...	"
Jails... ..	...	...	...	...	372
Education ...	...	...	...	...	373
Medical ...	...	...	...	...	376
Surveys ...	...	...	...	...	378

CHAPTER VI.—*Miscellaneous.*

Bikaner <i>nizāmat</i> ...	...	...	...	...	380
Bikaner <i>tahsil</i> ...	...	...	...	...	"
Lūnkaransar „ ...	...	...	...	...	381
Magrā <i>sub-tahsil</i> ...	...	...	...	...	"
Sūrpura „ ...	...	...	...	...	"
Bikaner city ...	...	...	...	...	382
Reni <i>nizāmat</i> ...	...	...	...	...	385
Bhādra <i>tahsil</i> ...	...	...	...	...	386
Churu „ ...	...	...	...	...	"
Nohar „ ...	...	...	...	...	387
Rājgarh „ ...	...	...	...	...	"
Reni <i>sub-tahsil</i> ...	...	...	...	...	388
Churu town ...	...	...	...	...	"
Nohar „ ...	...	...	...	...	389
Rājgarh „ ...	...	...	...	...	"
Reni „ ...	...	...	...	...	"
Sūjāngarh <i>nizāmat</i> ...	...	...	...	...	390
Sardārshahr <i>tahsil</i> ...	...	...	...	...	"
Sūjāngarh „ ...	...	...	...	...	"

	PAGE.
Sūjāngarh <i>nizāmat</i> —(contd.)	
Dūngargarh <i>sub-tahsil</i> ...	391
Ratangarh „ ...	392
„ town ...	„
Sardārshahr „ ...	„
Sūjāngarh „ ...	„
Sūratgarh <i>nizāmat</i> ...	393
Hanumāngarh <i>tahsil</i> ...	394
Mirzawāla „ ...	„
Sūratgarh „ ...	395
Anūpgarh <i>sub-tahsil</i> ...	„
Tibi „ ...	396
Hanumāngarh town ...	„
Sūratgarh „ ...	397
<i>Bibliography</i> ...	398

**Addenda and Corrigenda to the Western Rajputana States
Residency and the Bikaner Agency Gazetteer.**

VOLUME III.—A.

Page 1.—In the thirteenth line for "a compared" read "as compared."

Page 7.—Opposite the sixteenth line insert the side-heading "Fauna." In the twenty-sixth line I have written, on the authority of page 182 of the late Col. Adams' book "The Western Rajputana States," that *three species of the imperial sand-grouse* are more or less common in Jaisalmer. I fear this is a mistake. I am assured by everybody that there is *only one species of imperial sand-grouse*, namely the large or black-bellied, and after nearly a year's residence in Bikaner, the cold weather home of the bird, I am satisfied that this is the case. The "spotted" and "pin-tailed" sand-grouse are of course found in Jaisalmer, but they do not belong to the so-called "imperial"

Page 51.—In the second line for "dispering" read "dispersing."

Page 57.—In line 15 from the bottom insert a comma after the word "Alhar."

Page 60.—In the seventh line for "defea" read "defeat."

Page 65.—The side-heading should be lowered so as to bring it opposite lines 21-23.

Page 74.—In the last line but one insert a comma after "1882."

- Page 77.—In the fourth line insert a comma after the word "operations"; in the thirteenth line for "Government" read "government"; and insert a full stop after the third side-heading.
- Page 78.—In the first line of the foot note insert a bracket before the word "population."
- Page 87.—In the seventh line for "Oswāls" read "Oswāls."
- Page 89.—In line 17 from the bottom for "Jaliās" read "Jatiās."
- Page 90.—In the eighth line for "*panchayat*" read "*pañchāyats*," and in the twenty-first line for "*bis*" read "*bis*."
- Page 92.—In the second line for "Jasnāthi" read "Jasnāthi."
- Page 93.—In line 10 from the bottom for "Rajputs" read "Rājputs."
- Page 94.—In the eighth line for "*kheih*" read "*kheih*"; in lines 17 and 10 from the bottom for "*bāndiā*" read "*bandiū*"; and in the last line for "Marwāri" read "Mārwarī."
- Page 95.—In line 10 from the bottom insert a bracket after the word "colour."
- Page 99.—In the second side-heading for "classification" read "classification."
- Page 102.—The first and second side-headings should be in italics, thus: "*Bājra*," "*Jowār*"; in line 16 from the bottom for "*chiptū*" read "*chiptū*."
- Page 103.—In line 10 from the bottom for "*jowār*" read "*gowār*."
- Page 115.—In the fourth line for "serpentine" read "serpentine."
- Page 132.—In the first side-heading for "ormer" read "former."
- Page 136.—In line 15 from the bottom for "which" read "while."
- Page 146.—In line 19 from the bottom for "*khim-bāb*" read "*bhūm-bāb*."
- Page 173.—In the second side-heading for "institution" read "institutions."
- Page 175.—Lower the side-heading by three lines.
- Page 181.—In the tenth line delete the first word "of."
- Page 198.—In the eleventh line for "dnis" read "dnis."
- Page 208.—In line 19 from the bottom for "hotest" read "hottest."
- Page 209.—In line 15 from the bottom for "soliūm" read "sodium."
- Page 245.—In the fourth line of the foot-note for "ights" read "eighths."
- Page 246.—In the twenty-fifth line for "Guman" read "Gumān"; delete the bracket at the end of the last line.
- Page 247.—In the sixth line for "freo bootors" read "freebooters."
- Page 257.—In line 15 from the bottom for "Girāśias" read "Girāsias," and for "Minis" read "Minās."
- Page 265.—The second bracket in the twentieth line should come after "fee" and not after "Rs. 604"; in line 15 from the bottom insert a full stop after the word "south-east."
- Page 266.—In the foot-note for "206-247" read "246-247."
- Page 274.—In line 13 from the bottom for "Bhilāri" read "Bhilāri."
- Page 279.—The second side-heading should be in capitals, thus: "ARMY."
- Page 286.—In the twentieth line for "others" read "ottors."
- Page 287.—In the last line but one reverse the positions of "*supra*" and "238-239."

- Page 289.—In the eleventh line for "page" read "pages."
- Page 290.—In line 16 from the bottom for "Nasirābād" read "Nasirābād."
- Page 293.—In the fifteenth line insert inverted commas after the word "admiration"; in line 7 from the bottom after "cymbals" for a comma substitute a semi-colon.
- Page 296.—In the eighth line insert a bracket after "1209"; and opposite the eighth line from the bottom insert the side-heading "Gao Mukh."
- Page 302.—In line 9 from the bottom for "ashees" read "ashes."
- Page 312.—The last two lines of the last foot-note have been indifferently printed. They should run:—"grouse, 11 small grouse, and four ducks), while two other guns accounted for 58 (all imperial grouse) between them. The total bag was thus 825."
- Page 313.—In the last line of the foot-note insert a comma after "III-B."
- Page 318.—In the twenty-seventh line insert inverted commas after the word "court."
- Page 321.—In the second line of the foot-note for "enroute" read "en route."
- Page 323.—In the first side-heading for "Zorāwār" read "Zorāwar."
- Page 336.—In line 21 from the bottom for "pachhum" read "pachham."
- Page 343.—In the twentieth line for "are" read "or."
- Page 347.—In the sixteenth line for "at" read "of"; and in the last line but one for "pastyear" read "past year."
- Page 348.—The second, third and fourth side-headings should be in capitals, thus: "RENTS," "WAGES," "PRICES."
- Page 351.—Delete the comma at the end of the twenty-eighth line, and two lines lower down for "lois" read "lois."
- Page 352.—In line 22 from the bottom for "tariffaimed" read "tariff aimed."
- Page 359.—In the first line for "also" read "other."
- Page 366.—The number of this page should be as just stated, not "66."
- Page 369.—In line 25 from the bottom for "committies" read "committees."
- Page 371.—In line 13 from the bottom insert the word "or" between "corps" and "contingent."
- Page 378.—The last side-heading should be in capitals, thus: "SURVEYS."
- Page 380.—In the fifteenth line delete the word "five" but insert it in the next line between "last" and "years"
- Page 393.—In the second line for "on" read "or," and in the sixth line for "beenoriginally" read "been originally."
- Page 394.—In the last line but one for "thi" read "this," and delete the final letter of the word "outs."
- Page 395.—In line 11 from the bottom for "1888" read "1887."
- Page 397.—In the eleventh line for "Khāt" read "Khān."

TEXT.

THE WESTERN RAJPUTANA STATES RESIDENCY.

The Residency is situated in the west and south-west of Rājputāna, and comprises the three States of Jaisalmer, Jodhpur and Sirohi, lying between 24° 20' and 28° 23' north latitude and 69° 30' and 75° 22' east longitude. It is bounded on the north by Bikaner and Bahāwalpur; on the west by Sind; on the south by Gujarāt; and on the east by Udaipur, the British District of Ajmer-Merwāra, and Kishangarh and Jaipur.

The Residency has a total area of 52,989 square miles, and in 1901 contained thirty-two towns and 4,909 villages, with 2,163,479 inhabitants. In regard to area, it is more than twice the size of any political charge in Rājputāna, while in the matter of population it takes second place. The density per square mile at the last census was only 41, as compared with 76 for the Province as a whole; indeed, Jaisalmer in the extreme west, with its 4½ persons per square mile, is for its size (over 16,000 square miles) the most sparsely populated tract in India. Of the total population in 1901, Hindus formed nearly eighty-two, Musalmāns eight, and Jains seven per cent. The only towns that contained more than 10,000 inhabitants were Jodhpur (79,109 including the suburbs); Phalodi (13,924); Nāgaur (13,377); Pali (12,673); Sojat (11,107); Sāmbhar (10,873); and Kuchāwan (10,749). All of these belong to Jodhpur except Sāmbhar, which is held jointly by the Jodhpur and Jaipur Darbārs.

A Political Agent was first appointed to Jodhpur in 1839, and Jaisalmer was added to his charge thirty years later. Sirohi was, for the most part, under the political control of an Assistant to the Governor-General's Agent up to 1870, when it was placed under the Commandant of the Erinpura Irregular Force. The officer last mentioned became Political Agent of the three States in 1879, and his charge was styled the Western Rājputāna States Agency in the following year, but this arrangement did not last long, for in 1881 the command of the Erinpura Force was separated from the duties of the Political Agent, and in 1882 the headquarters of the latter were moved from Erinpura to Jodhpur (where they still are), and the designation of Western Rājputāna States Residency came into use. Some further particulars will be found in Tables Nos. I and II in Volume III-B.

PART I.

J AISALMER STATE.

Jaisalmer State.

CHAPTER I.

PHYSICAL ASPECTS.

Jaisalmer, the most western of the States of Rājputāna, lies between $26^{\circ} 4'$ and $28^{\circ} 23'$ north latitude and $69^{\circ} 30'$ and $72^{\circ} 42'$ east longitude and has an area of 16,062 square miles; it is thus in regard to size third among the twenty States and chiefships of the Province. Its greatest breadth from east to west is about 170 miles, and greatest length from north to south 136 miles; in shape it is an irregular oval, the longest axis being 210 miles, lying north-east and south-west. It is bounded on the north by Bahāwalpur; on the west by the Shikārpur District of Sind, and by Khairpur; on the south and east by Jodhpur; and on the north-east by Bikaner.

The country is almost entirely a sandy waste forming part of what is known as the great Indian desert. In the neighbourhood of Jaisalmer town, and within a circuit of about forty miles, the soil is very stony, and numerous low rocky ridges and hard undulating plains, covered in places to the south with smooth pebbles displaying the action of water, occur, but, with this exception, the general aspect is that of an interminable sea of sand-hills of all shapes and sizes, varying from twenty to two hundred feet in height and being sometimes two or three miles in length. The sand-hills in the west are covered with bushes of *phog* (*Calligonum polygonoides*), *lānā* (*Haloxylon salicornicum*) and *khejrā* (*Prosopis spicigera*), and those in the east with tufts of long grass. Shifting sands, locally termed *dhrians*, are common, especially in the west near Shāhgarh, where they are often many miles in extent and where their surface is continually changing, the sand being in one place scooped out into funnel-shaped hollows, and in another thrown up into beautifully rounded hills; these *dhrians* are very difficult to cross as the path shifts almost daily, and the people say that they are gradually but very slowly travelling northwards. Of the State as a whole it may be said that no country could well bear a more desolate appearance. The villages are few and far between, sparsely populated, and consist, as a rule, of some circular huts of brushwood collected round a well of brackish water. In many cases well water, which is drinkable in the cold season, becomes actually poisonous in the hot weather. The average depth of the wells is said to be about 250 feet, but one measured some years ago by an officer of the Great Trigonometrical Survey of India was found to be 490 feet deep. The acme of desolation is reached in the west where the *dhrians* impoverish the already sterile country; there are no crops here, and the people live almost

entirely on milk in various forms, a little *bājra* and *moth* being, however, imported from Sind in exchange for sheep.

The State possesses no perennial rivers, but there is one small stream called the Kākni, which rises near the village of Kotrī, seventeen miles south of the capital, and, after flowing first in a northerly and next in a westerly direction, forms a lake called the Bhūj *jhāl*; in years of heavy rainfall it deviates from its usual course and, instead of turning to the west, continues north for about twelve miles till checked by the recently constructed Dāiya dam. Another rivulet, the Lāthi-kī-nadi, formerly entered Jaisalmer from Jodhpur near Lāthi on the east and flowed west by north-west as far as Mohangarh, but its bed has contained no water since 1825 when the people tell of a very heavy rainfall.

The surface of the country is to a large extent covered by dunes of blown sand of the transverse type, *i.e.* with their longer axes at right angles to the direction of the prevailing wind. Rocks of jurassic age crop out from beneath the sand and have been divided* into the following groups :—

- | | |
|---------------------------------|--|
| 5. Abur (or Hābur) beds | { Sandstones, shales and limestones, with a conspicuous fossiliferous band. |
| 4. Parihār sandstones ... | { Soft, white, felspathic sandstones, largely composed of fragments of transparent quartz. |
| 3. Bidesar (or Bhadāsar) group. | { Purplish and reddish sandstones, with thin layers of black vitreous sandstone. |
| 2. Jaisalmer limestones ... | { Thick bands of buff and light brown limestone, interstratified with grey, brown and black sandstone and some conglomerate. |
| 1. Bālmer (Bārmer) sandstones. | { White, grey and brown sandstones and conglomerates, with fossil leaves and wood. |

Boulder beds of glacial origin occur at Bāp, resting on Vindhyan limestones, and are considered to represent the Tūlcher beds at the base of the Gondwāna system. To the north-west of the capital is a large outcrop of nummulitic rocks, probably of the same age as the Kīrthar group of Sind and thus indicating an easterly extension of the sea; the rocks represented are a white nummuliferous limestone (with which is associated ferruginous laterite) and shaly beds, mostly grey and impregnated with salt, though a fine-grained, pale buff-coloured fullers' earth is also found and is quarried for export under the name of *Multāni mitti*.

The most prominent constituent of the vegetation is the scrub jungle which shows forth, rather than conceals, the arid nakedness of the land. The scrub consists largely of species of *Capparis*, *Zizyphus*,

* R. D. Oldham, *Manual of the Geology of India*, 2nd edition, page 226, Calcutta, 1893.

Tamarix, *Grewia*, with plants characteristic of the desert, such as *rohira* (*Tecoma undulata*), *bāvli* (*Acacia Jacquemontii*), *hingota* (*Balanites Roxburghii*), and two cactaceous looking spurges called *thor* (*Euphorbia Royleana* and *E. neriiifolia*). Of indigenous trees the following are most common, though the term "tree" is rather a courteous acknowledgment of their descent than an indication of their size:—*khejra* (*Prosopis spicigera*); *jhāl* and *chhoti jhāl* (*Salvadora persica* and *S. oleoides*); *arunja*, *khair* and *kumtia* (*Acacia leucophlœa*, *A. catechu* and *A. rupestris*); two species of *ber* (*Zizyphus jujuba* and *Z. nummularia*); and *nīm* (*Azadirachta indica*). The shrubs include the *āk* or *ākra* (*Calotropis procera*), *hajeru* (*Mimosa rubricaulis*), *lānā* (*Haloxylon salicornicum*) and *phog* (*Calligonum polygonoides*); while the more important grasses are *bharūt* (*Cenchrus catharticus*), *phalis* (*Panicum crusgalli*), *murant* (*Chloris Roxburghiana*) and *sīwan* (*Panicum frumentaceum*).

The fauna is neither varied nor important. Early writers have mentioned the existence of a few lions and tigers in the south and south-west, but these animals have not been seen for many years; the wild ass (*Equus onager*) also seems to have disappeared. Wild pig, *nālgai* (*Boselaphus tragocamelus*) and even panthers are occasionally met with, and wolves and hyænas are not altogether rare. Black buck are found in small numbers in the east, and the following are more or less common throughout the State:—Indian gazelle (*chikāra*), hare, grey partridge, grey quail, bustard of both the great Indian and lesser varieties, common and painted sand-grouse, and three species of the imperial sand-grouse, namely, the spotted, the pin-tailed and the black-breasted. Water-fowl are very rare visitors as there is little or no suitable ground for them, even in the best of years. Snakes are numerous, and the Administration Report for 1904-05 gives the following description of a poisonous reptile called *pīvana*:—"It is just like a snake in appearance. It does not bite. It is said that when it finds a man sleeping, it creeps over his breast and continues breathing into his nose and mouth. Its breath is poisonous, and it is very seldom that a man poisoned by its breath recovers." To this the Resident adds that when in Bikaner he was told that the animal sought the warmth of the human breath to alleviate pain and that, its own breath being venomous, the victim of its attentions is poisoned and dies. A specimen of this peculiar snake was sent to Bombay for identification and turned out to be the *Sind karāit* (*Bungarus Sindanus*).*

The climate of Jaisalmer is dry and healthy, but the hot weather is very prolonged and the heat is intense and trying. The

* Since writing the above, I have come across a book called *Some account of the general and medical topography of Ajmer*; it is undated, but appears to have been published about 1840, the author being Assistant Surgeon R. H. Irvine. He mentions the existence of the *pīvana* in Jaisalmer and, after describing it as "very poisonous, of a yellow colour, thick and short," adds:—"The superstitious natives say that it does not bite, but comes (like incubus) during the night and rests on the breast of the sleeper, and, on leaving this situation, strikes with its tail, and the person dies in the morning!"

temperature generally ranges between 64° and 115° , and is highest in May and June, when scorching winds prevail with much violence; the coldest period is in January, when the thermometer frequently reads below freezing point during the night, and the air is crisp and bracing.

The State is situated near the limits of that part of Asia which belongs to the rainless regions of the world, and the rainfall, always scanty and precarious, generally varies in different parts. Statistics are available for the capital since 1883, and for five places in the districts since 1895. The average annual fall at Jaisalmer town during the past twenty-three years has been 6.18 inches, and the averages for the four rainy months are July 2.04, August 1.82, June 0.73 and September 0.65 inches respectively. The year of heaviest rainfall was 1893, when 15.24 inches were received, namely, 1.28 in May, 2.07 in June, 7.53 in July, 2.21 in August and 1.27 inches in September; the worst year, on the other hand, was 1899, when the total fall was but 26 cents, and the whole of this was received in April. For the districts we have records for the last eleven years only, and the annual averages work out thus:—Bāp in the north-east 5.49 inches; Devīkot in the south-east 4.91 inches; Khābha and Dewa, both more or less in the centre, 4.72 and 3.54 inches respectively; and Rāmgarh towards the north-west 3.25 inches. These figures are probably from one to two inches below the *real* average, for we find that, whereas the annual average rainfall at the capital during the last twenty-three years was 6.18, it was only 4.16 during the last eleven years, *i.e.* less than at Bāp, Devīkot and Khābha. Some further details will be found in Tables Nos. III and IV (in Vol. III-B), which show that in 1897 Dewa, Jaisalmer and Bāp all received eleven inches or more, while in 1899 not a single cent was registered at either Khābha or Rāmgarh.

CHAPTER II.

HISTORY.

The chiefs of Jaisalmer belong to the Chandrabansi or Lunar race of which Budba was the founder at a very remote period of the world's history, and which subsequently expanded into fifty-six branches and became famous throughout India. The chronicles mention Prayāg (the modern Allahābād) as the cradle of this race, and Muttra as the capital for many years. The clan to which the Jaisalmer family belongs is called Jādon after Yādu or Jādu, who is said to have been the fourth in descent from Budha, and one of whose successors was the deified hero Sṛī Krishna, who ruled at Dwārka. On the death of the latter, the tribe became dispersed, and many of its members, including two of Krishna's sons, proceeded northwards beyond the Indus and settled there. One of their descendants, Gaj or Gajpat, built a fort called Gajni or Gajnipur (identified by Tod as the Ghazni of Afghānistān but believed by Cunningham to be in the vicinity of Rāwalpindi, where tradition places an ancient city named Gājipur), but, being defeated and killed in a battle with the king of Khorāsān, his followers were driven southward into the Punjab where, several generations later, Sālivāhan established a new capital which he called Sālbāhanpur after himself and which is generally identified with Siālkot. This chief is said to have conquered the whole of the Punjab, to have regained Gajni, and to have had fifteen sons, "all of whom, by the strength of their own arms, established themselves in independence"; but, in the time of his successor, Baland, "the Turks" (*i.e.* the races from Central Asia) "began rapidly to increase and subjugate all beneath their sway, and the lands around Gajni were again in their power." Baland's son, Bhāti, was a renowned warrior who conquered many of the neighbouring chiefs, and it is from him that the tribe takes its name of Bhāti or Jādon Bhāti. He was succeeded by his son, Mangal Rao, whose "fortune was not equal to that of his fathers" and who, on being attacked by the king of Ghazni, abandoned his kingdom, fled across the Sutlej and found refuge in the Indian desert which has since been the home of his descendants.

The above is a brief and imperfect account of the early history of this clan, taken from the annals of Jaisalmer which, as Tod has remarked, must have been "transcribed by some ignoramus who has jumbled together events of ancient and modern date." Thus we are told that Sālivāhan founded the city of Sālbāhanpur in Vikrama *Samvat* 72 (or about 16 A.D.), that the third in succession to him, Mangal Rao, was driven southward into the desert, and that Mangal Rao's grandson, Kehar, laid the foundation of a castle called Tanot (still in Jaisalmer territory), which was completed in 731 A.D.; or, in other words, that Sālivāhan and his five immediate successors ruled

for more than seven hundred years! Again, it is stated that in Sālivāhan's time the cocoanut (an offer of marriage) came from Rājā Jai Pāl Tonwar of Delhi and was accepted, whereas the Tonwar dynasty ruled at Delhi for just a century from about 1050 A.D. The Sālivāhan above referred to has by some been identified with the hero of the same name, who defeated the Indo-Scythians in a great battle near Kahr̥or within sixty miles of Multān and who, to commemorate the event, assumed the title of *Sākāri* or foe of the Sākas (Scythians) and established the Sāka era from the date of the battle (78 A.D.),* but, though this man may be the founder of Sālbāhanpur, he cannot be the Sālivāhan described in the annals as the great-grandfather of Mangal Rao, who must have lived in the seventh or eighth century.

The country to which Mangal Rao fled about twelve hundred years ago was inhabited by various Rājput clans such as the Būtas and Chunnas (now extinct), the Barāhas (now Musalmāns), the Langābas (a branch of the Solankis), and the Sodhas and Lodras (both branches of the Paramāras), and with the two last and the Barāhas he speedily came into collision and subjugated some of their territory. A list of his successors will be found in Table No. V in Vol. III-B. The first of these, Majam Rao, was recognised by all the neighbouring princes and married the daughter of the Sodha chief of Umarkot (now in Sind). His son, Kehar I, was renowned for his daring exploits, and is said to have married the daughter of Alhan Singh, the Deorāṭ chief of Jālor (a fort now in Jodhpur territory). He laid the foundation of a castle, which he named Tanot after his son and which, according to the annals, was completed in 731, and became the first capital of the Bhūtis in this part of the country; the place lies about seventy-five miles north-west of the town of Jaisalmer. In the time of his successors, Tano or Tanuji and Bijai Rāj I, fights with the Barāhas continued and the latter, finding that they could not succeed by open warfare, had recourse to treachery. Under pretence of putting an end to the feud, they invited Bijai Rāj's son and heir, Deorāj, to marry the daughter of their chief and, when the Bhūtis had assembled, they fell on them and slew eight hundred, including Bijai Rāj himself; they subsequently invested and captured Tanot, killed most of the inhabitants, and the very name of Bhāti was for a time nearly extinct.

Deorāj, however, escaped the massacre through the help of a Brāhman and, after remaining in hiding for some time, proceeded to the country of his mother, who was of the Būta clan, where he was given land and erected a place of strength which he called Deogarh or Deorāwar after himself; it is marked Derāwar on most maps and is now in Babāwalpur about sixty miles from the northern frontier of

* A. Cunningham, *Archæological Survey of Northern India*, Vol. II, page 21.

† Another anachronism. Deora is the sept of the Chauhāns of which the Sirohi chief is the head, but it did not come into existence till the thirteenth century. At this time (eighth or ninth century), Jālor was held by the Paramāras, and they continued in possession till ousted by the Chauhāns at the end of the twelfth century.

the Jaisalmer State. Subsequently he proceeded to wreak vengeance on the Barāhas and subdue the Langābas, and one of his last exploits was to capture from the Lodra Rājputs the town of Lodorva, an immense city with twelve gates, the ruins of which are still to be seen about ten miles north-west of Jaisalmer town. He was one of the most distinguished chiefs of the clan, is counted as the real founder of the Jaisalmer family, was the first to assume the title of Rāwal and, after ruling for many years, was killed while out hunting by an ambush of Chunna Rājputs. His dates cannot be given with any certainty, but if the annals be correct in saying that his son and successor, Mūnda, married the daughter of Vallabharājā Solanki of Anhilwāra Pātan (in the Baroda State), we may say that he died towards the end of the tenth century.

Mūnda suitably avenged his father's death, but he ruled for only a short time, and there is little to be said regarding his successors, Wachuji or Bachera, Dusaj, and Bijai Rāj II, except that the last named was the son of a Mewār princess and was placed on the *gaddi* in preference to two elder brothers (one of whom was Jaisal). Further, Bijai Rāj married the daughter of Siddharājā Jai Singh Solanki, and this gives us another date, for the latter ruled at Pātan from 1093 to 1143. The issue of this alliance was Bhojdeo who had only just succeeded as Rāwal when his uncle Jaisal conspired against him, but, being always surrounded by a guard of five hundred Solankis, his person was unassailable. Jaisal therefore paid a visit to the king of Ghor and, by swearing allegiance to him, obtained the loan of a force to dispossess his nephew. Lodorva was encompassed and sacked, Bhojdeo was slain in its defence, the Musalmān army marched away with the spoils, and Jaisal became Rāwal. Lodorva was, however, ill-adapted for defence, so Jaisal sought for a stronger place and found it ten miles to the south-east, where he laid the foundation of the fort and city of Jaisalmer in 1156. He survived the change of capital only twelve years and was succeeded by his younger son Sālivāhan I, who is said to have married the sister or daughter of Mān* Singh Deora of Sirohi. While he was absent on this business, his son by another wife, Bijal, usurped the *gaddi* and, on his father's return, declined to vacate it, whereupon Sālivāhan retired to Deorāwar and was subsequently slain there repelling an irruption of the Baluchis. Bijal, however, did not rule long; having in a fit of passion struck his foster-brother, at whose instigation he had originally usurped power, "the blow was returned, upon which, stung with shame and resentment, he stabbed himself with his dagger." The next chief was Kailan, the elder brother of Sālivāhan, who had been expelled from the State in the time of his father Jaisal but was now recalled and installed at the age of fifty years. He is said to have defeated Khizr Khān Baloch and to have ruled for nineteen years. His successors, Chāchikdeo I and Karan Singh I, were engaged in

*If this is correct, the date of the foundation of Jaisalmer must be wrong, for Mān Singh's father is known to have been alive in 1249. Moreover, the Deora sept did not then exist as it takes its name from Mān Singh's son, Deorāj.

constant broils with their neighbours, amongst whom were the recently arrived Rāthors who had settled in the land of Kher at Jasol and Bālotra, while Karan Singh's son, Lākhan, was apparently a simpleton who, when the jackals howled at night, enquired the cause and, on being told that it was from the cold, ordered quilted coats to be prepared for them. As the howling still continued, although he was assured his commands had been obeyed, he caused houses to be built for them in his game preserves (*rammas*). He was allowed to rule for four years when he was replaced by his son, Pūnpāl, who, however, possessed such an ungovernable temper that the nobles deposed him and placed his great-uncle, Jet Singh I, on the *gaddi*.

Jet Singh was the elder grandson and heir-apparent of Chāchik-deo and, on being superseded by his younger brother, Karan Singh I, had abandoned his country and taken service with the Muhaminadans of Gujarāt. He was now recalled and installed as Rāwal, and is said to have ruled from 1276 to 1294. According to the local bards, Alā-ud-dīn was king of Delhi at this time and despatched an immense army to punish the *Bhātis* for having carried off certain treasure which was being conveyed from Tatta and Multān to his capital. The fort of Jaisalmer is said to have been besieged for nine years and to have been captured in 1295, when Muḥrāj I, Jet Singh's successor, was killed in the final *sortie*. Tod, quoting from the annals, gives a graphic account of the defence and the awful closing scenes but remarks in a foot-note:—"This can mean nothing more than that desultory attacks were carried on against the Bhāti capital. It is certain that Alā never carried his arms in person against Jaisalmer." To this it may be added that none of the Muslimān historians mention this very prolonged siege and obstinate defence, and that, if Alā-ud-dīn was king, the dates are faulty. In 1286, when the siege is said to have begun, Balban was ruling, and the Slave dynasty ended in 1290; while 1295, when the fort is supposed to have been taken, was the year in which Alā-ud-dīn Khiljī proclaimed himself Sultān.

The Muslimāns are said to have kept possession of Jaisalmer for two years and to have then abandoned the place, which remained deserted for a short time. Some Rāthors from Mewo in the Mallāni district of Jodhpur attempted to settle there but were driven away by Dūda, a son of Jet Singh, who for this exploit was elected Rāwal and proceeded to repair the town and fort. One of his sons, Tiluk Singh, was renowned for his predatory exploits; he extended his raids to Ahu and Jālor and even carried off the stud of Alā-ud-dīn from the Anāsāgar at Ajmer. This last insult provoked another attack on Jaisalmer, attended with the same disastrous results; again the females were destroyed, and Dūda, with Tiluk Singh and seventeen hundred of the clan, fell in battle in 1306. The next chief was Gharsi, a nephew of Muḥrāj I, who had been captured at the first siege and taken to Delhi where, by his courage and gallant bearing, he gained the king's favour and obtained a grant of his hereditary dominions, with permission to re-establish Jaisalmer; he is said to have been

assassinated about 1335 by some relations of his predecessor, Dūda, and was succeeded by his brother, Kehr II, who ruled in peace for about sixty years. Of the thirteen chiefs who followed him the annals tell us very little; their names were (1) Laekhan, (2) Bersi, (3) Chāchikdeo II, (4) Devi Dās, (5) Jet Singh II, (6) Karan Singh II, (7) Lānkaran, (8) Māhdeo (or Baldeo), (9) Har Rāj, (10) Bhīm, (11) Kalyān Dās, (12) Manohar Dās, and (13) Rāmechandra. An inscription, dated 1448 in a temple at Jaisalmer, tells us that the third of the above, Chāchikdeo, was ruling in that year. The seventh (Lānkaran) opposed Humāyūn in 1541 when on his way to Ajmer via Jaisalmer and Nāgaur or, as the *Tabakāt-i-Akbarī* puts it, "he shamefully took an unmanly course. He sent a force to attack the small party of the emperor on the march, but it was defeated and driven back with loss. Humāyūn had a great many wounded." In the sixteenth century we hear of the Turkoman governor of Umarkot, under the Arghūn dynasty, marrying the daughter of a chief of Jaisalmer, and the son of this marriage was Khān-i-Zamān, a distinguished general of his time in Sind, which was then on friendly political terms with Jaisalmer. The *Beg-lār-nāmāh* mentions the deputation of Khān-i-Zamān on a mission to Rāwal Har Rāj with a robe of honour from Muza dān Beg of Sind. The name of Rāwal Bhīm appears in the *Ain-i-Akbarī* in the list of *mansab-dārs* (commanders) of 500, and Jahāngir* described him as "a man of rank and influence. When he died, he left a son two months old who did not live long. Bhīm's daughter had been married to me when I was prince, and I had given her the title of *Malikah-i-Jahān*. This alliance was made because her family had always been faithful to our house." Rāwal Bhīm married the niece of Rājā Sūr Singh of Bikaner and, shortly after his death, the Bhātis killed his infant son, on which Sūr Singh swore that no Bikaner chief's daughter should again go to Jaisalmer, an oath which has been held binding by his successors. Bhīm was followed on the *gaddi* by his brother Kalyān Dās, about the year 1624. According to the *Ain-i-Akbarī*, he had been appointed governor of Orissa in 1610, while the *Tuzak* states that he was made a commander of 2,000 (1,600 horse) about six years later. Jahāngir writes that he "called him to court in 1626, invested him with the *tika*, and made him Rāwal." Of the next two chiefs, Manohar Dās and Rāmechandra, nothing is known except that the former was the son of Kalyān Dās.

We now come to Sahal Singh, a great-grandson of Rāwal Māhdeo and a contemporary of Shāh Jahān. Tod says that he was "the first prince of Jaisalmer who held his dominions as a fief of the empire," but this does not accord with what Jahāngir has written. He appears to have been related to the Kishangarh family, his aunt having been married to Rājā Kishan Singh, and he is said to have served with distinction at Peshāwar, where on one occasion he saved the royal treasure from being captured by the Afghān mountaineers. As a reward for this exploit and because he was a favourite of the

* See *Tuzak-i-Jahāngiri*, page 159.

Rajput chiefs who were serving there with their contingents, Shāh Jahān ordered that he should be installed as ruler of Jaisalmer although he was not the legitimate heir to the *gaddi*. The State had now arrived at the height of its power; the territory extended north to the Sutlej, comprised the whole of Bahāwalpur westward to the Indus, and to the east and south included many districts subsequently annexed by the Rāthors and incorporated in Jodhpur and Bikaner. But from this time till the accession of Mulrāj II in 1762 the fortunes of Jaisalmer rapidly declined, and her boundaries were wofully curtailed.

Sabal Singh ruled for ten years (1651—61) and was succeeded by his son, Amar Singh, a wise and valiant chief who cleared his country of robbers and defeated an army sent against him by Anūp Singh of Bikaner. He died in 1702 and was followed by Jaswant Singh, in whose time the districts of Pūgal, Bārmer and Phalodi were seized by the Rāthors, while the territory bordering the Sutlej was taken by Dāud Khān, an Afghān chieftain from Shikārpur. The three next rulers appear to have been Budh Singh, Tej Singh and Akhai Singh, though there is much confusion owing to constant fighting between rival claimants, first one and then another being temporarily successful. Akhai Singh ruled from 1722 to 1762 and established a mint at his capital in 1756 (the currency being called after him Akhai Shāhi); but he lost another portion of his dominions, namely Deorāwar and the tract in the vicinity called Kbādal (the earliest of the Bhāti conquests in the desert), to Bahāwal Khān, son of Dāud Khān and founder of the Bahāwalpur State.

Mulrāj II succeeded Akhai Singh and ruled for fifty-eight years. The unhappy choice of a minister completed the demoralisation of the Bhāti principality. This man, by name Sarūp Singh, was a Mahājan by caste and a Jain by religion and, having deeply offended some of the nobles and the heir-apparent (Rai Singh), was cut down by the latter in the Rāwal's presence. Then ensued a state of anarchy, the nobles wishing to depose Mulrāj and substitute Rai Singh, the latter steadily refusing to listen to the proposal; eventually, however, Rai Singh and his partisans went into exile, while the nobles, whose estates had been sequestered, took up their abode at Sheo and Bārmer (in Jodhpur) to the south whence, for twelve years, they devastated the country, plundering even to the gates of Jaisalmer. Rai Singh, after remaining in exile for two or three years, returned to his native city but was refused admittance and deported to the fort of Dewa (about twenty miles to the north).

Rāwal Mulrāj waited until Sālim Singh, the son of his slaughtered favourite, Sarūp Singh, was old enough to manage affairs and then made him minister. Sālim Singh appears to have been the very incarnation of evil, "uniting the subtlety of the serpent to the ferocity of the tiger." He is described as having been in person effeminate, in speech bland; pliant and courteous in demeanour; promising without hesitation, and with all the semblance of sincerity, what he never had the remotest intention to fulfil. With commercial

men and with the industrious agriculturists or pastoral communities he had so long forfeited all claim to credit that his oath was not valued at a single grain of the sand of their own desert dominion; and finally he drove out the Pāliwāl Brāhmins, who had come from Pāli in Jodhpur in the thirteenth century, were famous as enterprising cultivators and landholders, had constructed most of the *kharāns* or irrigation tanks now to be found in the country, and whose solid well-built villages still stand, deserted, to mark an era of prosperity to which it will be difficult for the State ever again to attain.

It happened that the nobles exiled with Rai Singh waylaid and captured this man on his return from a mission to Jodhpur in or about 1793, but, their hearts softening to his entreaties, they allowed him to depart uninjured. As a return for this kindness he had Zorāwar Singh, Thākur of Jhinjiniālī, who had been mainly instrumental in saving him, poisoned; he caused the castle in which Rai Singh and his wife were living to be set on fire at a time when it was impossible for them to escape, and they were burnt to death; and their children he confined at Rāngarh in a remote corner of the desert, where he had them poisoned. He then declared Gaj Singh, the youngest but one of all Muṛāj's grandsons, to be heir-apparent and proceeded to put to death all those whose talent he had any reason to fear. The town of Jaisalmer was depopulated by his cruelty, and the trade of the country suffered from his harsh and unscrupulous measures.

The State which, owing to its isolated situation, escaped the ravages of the Marāṭhās, was one of the last to be taken under British protection. The treaty is dated 12th December 1818, and by it the principality was guaranteed to the posterity of Muṛāj; the chief was to be protected from serious invasions and dangers to his State, provided the cause of the quarrel was not attributable to him, and he was to act in subordinate co-operation with the British Government. No tribute was demanded. Muṛāj died in 1820 and was succeeded by his grandson, Gaj Singh, who "was fitted, from his years, his past seclusion, and the examples which had occurred before his eyes, to be the submissive pageant Sālim Singh (the minister) required." For a short time, the latter appeared to fall in with the march of universal reformation, and this was attributed to his anxiety to have an article added to the treaty, guaranteeing the office of prime minister in his family; but seeing no hope of fixing an hereditary race of vampires on the land, his outrages became past all endurance and compelled the British Agent to report to his Government on the 17th December 1821 that he considered the alliance disgraceful to our reputation, by countenancing the idea that such acts could be tolerated under its protection. "Representations to the minister were a nullity; he protested against their fidelity, asserted in specious language his love of justice and mercy, and recommenced his system of confiscations, contributions and punishments with redoubled severity." Up to 1823 Sālim Singh constantly urged, in the name of his master, claims to territories in the possession of other chiefs, but these were rejected as the investigation of them was

inconsistent with the engagements subsisting between the British Government and other States. In 1824 Sālim Singh was wounded by a Rājput, and as there was some fear that the wound might heal, his wife gave him poison ! On his death the leading men of the State appeared disposed to support the cause of his eldest son who, after a ministry of a few months, had been imprisoned by Mahārāwal Gaj Singh ; but on the British Government declaring that it did not intend to interfere with the just authority of the chief in the appointment or punishment of his minister, all parties returned to their allegiance and Gaj Singh, now in his twenty-third year, assumed the personal administration and by measures of a just and conciliatory nature gained great popularity with his people.

In 1829 Mahārājā Ratan Singh of Bikaner, in violation of his treaty engagements, invaded Jaisalmer to revenge some injuries committed by subjects of the latter. Gaj Singh prepared an army to repel the invasion, and both parties had applied to neighbouring States for assistance when the British Government interfered, and, through the arbitration of the Mahārānā of Udaipur, the dispute was settled. Squabbles between Bikaner and Jaisalmer, however, continued and had reached such a point in 1835 that a British officer was deputed to effect a reconciliation ; his mission was happily attended with success. In 1838-39 the first Afghān war necessitated the despatch of British troops to join the main army by way of the Indus, and Gaj Singh's exertions to supply camels for transport purposes were such as to elicit the special thanks of Government ; while in 1844, after the conquest of Sind, the forts of Shāhgarh, Gharsia and Ghotāru, which had formerly belonged to Jaisalmer, were restored to the State.

Gaj Singh died in 1846 without male issue, and his widow adopted his nephew Ranjīt Singh who, in 1862, received the usual *sanad* guaranteeing to him the right of adoption and who died on the 16th June 1864 without an heir. His widow adopted his younger brother, Bairi Sāl, who was only about fifteen years old and refused to take his seat on the *gaddi*, giving as a reason that he thought he should never be happy as ruler of Jaisalmer. In consideration of his youth, the Government of India allowed the question to remain in abeyance and the installation to be deferred, affairs being in the meantime administered by his father, Thākur Kesri Singh. Within sixteen months Bairi Sāl had outgrown his scruples and was formally installed as Mahārāwal on the 19th October 1865 ; his father continued as minister for four years when he died and was followed by his elder brother, Chhatar Singh, who, though respected by all classes, was not of the same determined character, nor was he so much feared by the plundering Bhātis. In 1870 an extradition treaty was concluded with this State by the Government of India (followed in 1887 by the usual modifying agreement) ; in 1873 the chief married a daughter of the Mahārāwal of Dūngarpur ; and in 1879 he entered into an agreement with Government by which he undertook to limit the local manufacture of salt to 15,000 maunds a

year solely for consumption and use within his territories, and to abolish all dues on British duty-paid salt.

Muhārāwal Bairi Sāl, who had been ailing for some time and whose illness had rather stood in the way of reform, died on the 10th March 1891 without an heir. His widows adopted Syām Singh, son of Thākur Kushāl Singh of Lāthi, and the choice being confirmed by the Government of India, Syām Singh succeeded and took the family name of Sālīvāhan. He was born on the 12th June 1887, was a student at the Mayo College at Ajmer from 1894 to 1906, and was married to the daughter of the Muhārāo of Sirohi in February 1907. During his minority the administration is being conducted by a *Dīvān* and Council under the general superintendence of the Resident, Western Rājputāna States. The principal events of the last fifteen years have been the famines and scarcities which have caused a great falling-off in the population and the revenues and the accumulation of a large debt, and have hampered the efforts of the two capable officials, Jagjivan and Lakshmī Dās, who have successively held the post of *Dīvān*. The Muhārāwals of Jaisalmer are entitled to a salute of fifteen guns.

Of objects of antiquarian interest no very reliable account exists. According to Thornton, the town of Birsilpur in the extreme north-east was founded in the second century; the place is now included in the estate of one of the first class nobles and possesses a fort of no great strength. Tanot, the first desert-capital of the Bhātis, lies in the north-west corner and has a fort and temple dating from the eighth century. Lodorva, the ruins of which still exist about ten miles north-west of Jaisalmer town, was the Bhāti capital from the end of the tenth to the middle of the twelfth century; it was taken by Rāwal Deorāj from the Lodra Rājputs, a branch of the Paramūras, in whose time two temples, one to Mātā and the other to Pārasnāth, are said to have been constructed; these buildings, which are in every-day use, would therefore be at least 950 years old. The fort of Devikot in the south-west has a Hindu temple of nearly the same age, while at the village of Sirwa in the vicinity is a building with thirty-two pillars said to have been erected in 820 A.D. and now much out of repair. The objects of interest at the town of Jaisalmer are noticed in Chapter VI below.

CHAPTER III.

THE PEOPLE.

The population at each of the three enumerations which have been made was :—108,143 in 1881 ; 115,701 in 1891 ; and 73,370 in 1901. The increase during the first of these decades was nearly seven per cent., or about normal, while the decrease of more than thirty-six per cent. since 1891 was due to a series of indifferent seasons culminating in the famine of 1899-1900, in the course of which many people emigrated and a considerable number died from cholera. The decrease among males and females was about the same, namely, thirty-seven per cent. among the former and nearly thirty-six among the latter. Taking the population by religion, we find that Animists (who, however, have never been numerous) lost sixty per cent., Musalmāns $36\frac{1}{2}$, Hindus $35\frac{1}{2}$ and Jains more than twenty-two per cent.

Jaisalmer is by far the most sparsely populated State in Rājputāna, the density per square mile having been 6.73 in 1881, 7.20 in 1891, and 4.57 in 1901. In the districts, or *hukūmats* as they are called, the density varies considerably ; thus Kishangarh in the north with an area of 400 square miles contained but 403 inhabitants occupying 102 houses in a single village, while Lākha in the centre supported fifteen persons to the square mile.

At the last census the State was made up of one town (the capital) and 471 villages ; the number of occupied houses was 17,763 and the average number of persons per house was 4.13. The capital contained 7,137 inhabitants, or about 9.7 per cent. of the total population, who were living in 2,071 houses. The villages have decreased in number as the population has increased, and *vice versa* (see Table No. VI in Vol. III-B), but this was perhaps due to some difference in the definition of the term "village" at each census. There is only one village to every thirty-four square miles of country ; the Kishangarh and Tanot *hukūmats*, the areas of which are respectively about 400 and 300 square miles, possess a single village each, while at the other extreme is the Shāhgarh-Ghotārū *hukūmat*, with one hundred villages spread over an area of about 1,600 square miles. Again, taking the State as a whole, each village contains on an average thirty-three houses and 140 inhabitants.

Of the 73,370 persons enumerated in 1901, ninety-two per cent. were born in the State, more than five per cent. in Jodhpur, one per cent. in Bikaner, and the majority of the remainder hailed from either Sind or Bahāwalpur. Jaisalmer received from other States in Rājputāna 4,974 persons and gave them in return 1,203 persons, thus gaining 3,771 persons, the majority of whom were females who had married and settled here. In its transactions with Provinces and States of India outside Rājputāna, Jaisalmer, however, lost heavily,

for while immigrants numbered only 806, emigrants numbered at least 36,591 * and were found chiefly in Sind and Bahawalpur. This was entirely in accordance with expectations, for emigration is an annual event in these parts where there is practically only one crop a year, namely, that sown in the rains and gathered in September or October; moreover, it was known that very many had left the State during the disastrous famine of 1899-1900 and had not returned by the date (1st March 1901) on which the last census was taken.

The registration of births and deaths was started both at the capital and in the district in 1893, but the statistics are not altogether reliable, especially in the rural area. During the nine years ending 1901, the average annual number of births registered in the entire State was 2,291, and of deaths 2,358; in the year 1900 (a particularly unhealthy one) only 1,126 births and as many as 6,324 deaths were recorded, and if we assume the population to have been the same as in 1901, these figures give ratios of about fifteen and eighty-six per mille respectively. During the four years ending 1905, the average annual number of births registered has been 1,333, and of deaths 1,123; or, in other words, the birth-rate has averaged eighteen, and the death-rate fifteen per mille. Eliminating the districts, where the procedure is certainly faulty, the annual birth-rate at the capital during the last four years averages nearly forty, and the death-rate thirty per mille.

Epidemics are of rare occurrence. The people suffer chiefly from milder malarial fever, pneumonia and bronchitis in consequence of their scanty clothing, or from diseases of the skin, gonorrhoea and small-pox. There is a saying that neither mud, mosquitoes nor malaria are to be found in these regions, and malarial fevers are certainly not so severe as in other parts. Smallpox is less common than it used to be, and cholera was quite unknown till December 1899, when it broke out in the north-east, reached the capital in June 1900 and thence extended to the district generally, but it died out in September after claiming some three or four thousand victims, and has not reappeared. Plague is fortunately still a stranger.

The number of afflicted persons fell from 296 in 1891 (239 blind, forty-four insane and thirteen lepers) to 58 in 1901 (forty blind, sixteen deaf-mutes and two insane); the decrease in the number of the blind is perhaps due to vaccination operations, but the recent famines have probably carried off most of the infirm.

At the last census about 53·7 per cent. of the people were males, but the percentage of females to males has been steadily increasing during the past twenty-five years, having been about seventy-seven in 1881, eighty-four in 1891, and eighty-six in 1901. Taking the population by religion, we find that in 1901 nearly fifty-three per cent. of the Hindus and fifty-six per cent. of the Musalmāns and

* A large number of persons enumerated outside the Province gave their birthplace as Rajputana, without mentioning any particular State; some probably belonged to Jaisalmer.

† Estimated at the time at from 40,000 to 50,000.

Animists were males, and it is only among the Jains that females predominated, forming fifty-three per cent. of the total number. Statistics relating to age are in no part of India very accurate, but, such as they are, they show the Musalmāns to live longest, 57 per cent. of them being sixty years of age or more; the similar figures for Hindus, Animists and Jains were 4·8, 4·4 and 5·2 per cent. respectively. Again, the women are longer lived than the men, especially among the Jains and Hindus; the excess of boys over girls under five years of age does not necessarily point to female infanticide which, though common in former days, is believed not to be now practised.

In 1901 more than fifty-one per cent. of the people were returned as unmarried, about thirty-five as married, and over thirteen per cent. as widowed. Of the males, about sixty-three, and of the females thirty-eight per cent. were single; there were 1,153 married females to 1,000 married males and 2,863 widows to 1,000 widowers. The relatively low proportion of unmarried women and the high proportion of widows are the results of the custom which enforces the early marriage of girls and discourages the remarriage of widows. Polygamy is said to be rare, and the excess of wives over husbands is ascribed chiefly to many married men having temporarily left the State. Among the males, thirty-four per cent. of the Musalmāns, thirty-seven of both Hindus and Animists, and thirty-nine per cent. of the Jains were married or widowed, while for females the similar percentages were:—Musalmāns fifty-six, Animists fifty-eight, Hindus sixty-three and Jains sixty-five. Early marriage prevails to some extent, especially among the Hindus and Animists. Of every 1,000 children under ten years of age, thirteen were married or widowed, and of every 1,000 girls under the same age, twenty-four were wives or widows; again, five per cent. of the children, and nine per cent. of the girls, under fifteen years of age were married or widowed. Polyandry is unknown, and divorce, though permissible, is seldom resorted to.

The language spoken by eighty per cent. of the people is Mārṇwārī, one of the four main groups of Rājasthānī; the variety most met with in Jaisalmer is that known as Thālī or the western Mārṇwārī of the desert. Another fourteen per cent. of the people speak Sindī, the most common dialect being called Thareli. According to the census returns, a further four per cent. speak Jaipuri, another of the four main groups of Rājasthānī, but the State authorities point out that this is an error, and that Dhātī or *Dhāt-kī-bolī*, which is a form of Sindī and is said to take its name from the country around Umarkot which was formerly called Dhāt, should be substituted.

Of castes and tribes the following were most numerous at the last census:—Rājputs (31,513 or about 42½ per cent. of the total population); Chāmārs (8,883 or twelve per cent.); Sheikhs (5,569 or 7½ per cent.); Malhājans or Baniās (5,248 or seven per cent.); and Brāhmins (3,710 or five per cent.).

More than one-third of the Rājputs are converts to Islām who, though found in every district, reside chiefly in the western half of the State and still retain many of their ancient customs and ideas. The Hindu Rājputs belong mostly to the ruling clan, Bhāti, but there are a good many Rāthors, and the Chauhāns, Sesodias, Solankis, etc., are all represented. In olden times the Bhātis, from their chief downwards, were famous for their plundering propensities; their looting of the royal treasure and their carrying off of Alā-ud-dīn's horses may be mentioned as instances. Within the last forty years, they have been described as a roving predatory class, committing dacoities in their own territory and in the neighbouring States; mounted, as they were, on swift camels and connected by marriage with numerous Rāthor families across the eastern and southern borders, with whom, when followed up, they found shelter, it was difficult to capture them red-handed. But though complaints against them are still received, it is believed that they have largely settled down as respectable subjects and are not quite so black as they are usually painted.

Of the other castes mentioned above, the Chamārs are workers in leather, village servants and to some extent agriculturists; the Sheikhs, many of whom are Hindu converts, follow trade and cultivate land; the Mahājans, mostly of the Mahesrī and Oswāl divisions, are money-lenders and traders; and the Brāhmans, who are priests, shopkeepers and in the service of the State, belong chiefly to the Pushkarna, Srīmūli, Joshī and Purohit sects.

In 1901 nearly seventy-one per cent. of the people were Hindus, more than twenty-five per cent. Musalmāns, two per cent. Animists, and about $1\frac{1}{2}$ per cent. Jains; there were also a couple of Sikhs and one Aryū. The various sects of the Hindus were not recorded, but the Śāktas or worshippers of the female energy (*śakti*) of the primordial male, Pnrusha or Siva, are said to be most numerous. The Muhammadans were all Sunnis; the Animists all Bbils of the village or cultivating class, having little or nothing in common with their wilder brethren who inhabit the hills in southern Rājputāna and being for all intents and purposes Hindus; while nearly ninety-nine per cent. of the Jains were of the Svetāmbara sect, the remainder being Dhūndias.

Rather more than $36\frac{1}{4}$ per cent. of the people returned some form of agriculture as their principal means of subsistence, and a further nine per cent. were partially agriculturists. The industrial population amounted to nearly $43\frac{1}{2}$ per cent., the provision of food and drink giving employment to twenty-four per cent. and the weaving of cotton to about ten per cent., while seven per cent. were workers in leather. The commercial classes, such as money-lenders, general merchants and shopkeepers, formed 6.75 per cent., and the professional classes 2.60 per cent. The people generally lead a wandering life and are by nature hardy and healthy; many of them keep herds of camels, cattle, sheep and goats, and migrate regularly to Sind and Bahāwalpur in the cold weather.

The staple food of the masses is *bājra*, and of the well-to-do wheat or barley; milk enters largely into the diet of the people, and tobacco is in general use but has to be imported. Not much liquor is drunk, but a good deal of opium is consumed both as an occasional beverage and by *habitués* of the drug. Vegetables are scarce, the chief source of supply being the *khejra* tree. As in the desert parts of Jodhpur, during times of scarcity, many subsist on the roots and seeds of grass or the fresh bark of the tree just mentioned, while locusts are much prized as an article of diet, both in the fresh and preserved state. In the matter of dress, there is nothing particular to record; the majority are very poor, dress simply and cannot afford ornaments for their women. Their dwellings are usually circular huts, but here and there fine stone houses, some of which exhibit considerable ornamentation, are to be found. These houses were built by wealthy merchants, mostly Pāliwāl Brāhmans, to whom, in the old days, Jaisalmer was a favourite retreat, being remote from the scenes of war and exactions in the times of the Mughals, Marāthās and Pindāris.

The Hindus mostly cremate their dead, but infants who die before leaving their mother's breasts are buried, as also are Sanyāsis, Gosains, Kābirpanthis, Bishnois and Nāths. The Musalmāns always practise inhumation.

Of games and amusements there is no great variety. The camel is ridden for pleasure as well as to accomplish journeys, and the riders often race against each other. Other amusements are dancing parties and musical entertainments, the instruments used being the *sārangi* or fiddle and the *tabla* or drum. Among the younger generation, popular games are *tāngal*, so called because all the players have to stand on one leg, and *kūndo*, a kind of hockey. In the first of these games each player has to hold his left foot in his right hand, and the leader of one party, shielded by the rest of his side, has to endeavour to hop across a line marked on the ground while the other party attempt to stop him; there is much charging and buffeting with the left hand on either side, and if any one loose hold of his left foot, he has to retire from the contest which continues till the leader has crossed the boundary or till he and the rest of his side have been disqualified.

There is nothing peculiar in the system of nomenclature. The upper classes usually have two names, the first being of religious origin or given out of affection or fancy, and the second being representative of the caste or clan; for example, the Rājput's second name is usually Singh, the Brāhman's will be Mal or Karan or Prasād, the Mahājan's Lāl or Dās, etc. Among the lower classes there is generally one name, a diminutive of that of a higher class, e.g. Udā from Udai Singh, Birdhā from Birdbī Chand, and the like. In the names of places, the most common endings are:—*āla*,—*wāla* and—*wāli*, all meaning town, village or habitation;—*garh* (fort); and—*sar* (lake).

CHAPTER IV.

ECONOMIC.

The soil is for the most part light and sandy, and, as the rain sinks in and does not flow off the surface, a small rainfall suffices for the crops. In the north-east round Bāp and Bikampur, and in some districts adjacent to the capital, the soil is firmer and the storage of water becomes possible, but, speaking generally, only rain crops are grown, while in the Tanot, Kishangarh and Bārāwa-Buili *hukāmots* in the north-west and north and in Shālgarh-Ghotār in the west, there is practically no cultivation whatsoever. The system of agriculture is everywhere rude, and the implements are all of the old-fashioned variety. When the rains begin, the sandy land is ploughed by camels and the harder soil by bullocks; the seed is sown broadcast and, after it has sprouted, a few showers at long intervals bring it to maturity. The ploughs are light and merely scratch the surface; and, as the camels move quickly, it is possible for each cultivator to put a considerable area under crop. No agricultural statistics are available, but in ordinary years a good deal of cultivation goes on in the rains, and it is estimated that in favourable seasons (which are few and far between) the produce is just about sufficient for the immediate wants of the people.

Nearly 28,000 persons were returned in 1901 as dependent on pasture and agriculture, or about thirty-eight per cent. of the total. The actual workers included in these groups numbered twenty-six per cent. of the male population of the State and three per cent. of the female. In addition to these, about 6,600 persons recorded agriculture as a subsidiary occupation. Non-workers or dependents—chiefly women and children—formed twenty-three per cent. of the total population and as much as sixty per cent. of the population supported by agricultural labour.

The principal *kharij* or autumn crops are *bājra* or spiked millet (*Pennisetum typhoides*), *jowār* or great millet (*Sorghum vulgare*), the creeping pulses, *māng* (*Phaseolus mungo*) and *moth* (*P. aconitifolius*), and *tīl* or sesame (*Sesamum indicum*). Of these, *bājra* is the most important; it is sown as early as possible, takes about three months to ripen, and the average yield per acre is estimated at $1\frac{1}{2}$ cwt. provided the rainfall has been good and timely. *Jowār* is sown about the same time, takes a little longer to ripen, and yields about $2\frac{1}{2}$ cwt. per acre. The pulses are usually sown later and ripen in some six weeks if the rainfall be sufficient, while *tīl* is grown sometimes by itself and sometimes mixed with *bājra* or *jowār* and ripens in October or November. Tod mentions cotton as being "produced in the same soil as *bājra*," but it is not now cultivated. The *rabi* or spring crops are grown only in those parts where

artificial irrigation is possible, and consequently not on a large scale; they consist of wheat, gram and, very occasionally, a little barley. Under favourable conditions the average yield of an acre sown with wheat or gram is said to be nearly six cwt.

Very little use is made of manure, but the cattle are sometimes penned in the fields so that their excreta may not be lost.

The wealth of the rural population consists almost entirely in their herds of camels, cattle, sheep and goats which thrive in spite of the arid nature of the country. The camels are looked on more as members of the family than dumb animals; they plough and harrow the ground, bring home the harvest, carry wood and water, and are both ridden and driven. Their milk is used as an article of diet and as a medicine; their wool is sold; and when they die, their skin is made into jars for holding *ghī* and oil. The Jaisalmer camels are famed for their easy paces, speed and hardiness, and can go long distances without food or water, subsisting for days on a little unrefined sugar and sulphate of alum, which are carried in the saddlebags. The best of the breed are smaller and finer in the head and neck than the ordinary camel of western Rājputāna, and will cover from eighty to one hundred miles in a night when emergency demands speed. Prices range from Rs. 60 to Rs. 300. Cattle, goats and sheep are extensively bred, and are of a good class; many of the bullocks are exported to Sind and Gujarāt. Goats supply the great bulk of the animal food of the country, and their milk is in general use as an article of diet; sheep, on the other hand, are kept chiefly for their wool, but large numbers are exported and, though small, fatten well and, when carefully fed, yield excellent mutton. The average prices of the various animals are (in British currency):—female buffalo Rs. 50; bullock or cow Rs. 30; male buffalo Rs. 10; and sheep or goat Rs. 3 to Rs. 7, according to age.

In years of good rainfall there is an abundance of pasturage, the Pāli jungles in the north and *bīrs* in other parts producing excellent grasses; but the difficulty of water is almost always present, for where it exists, it is generally bad. In adverse seasons the cattle are taken away to more favoured places.

Some eighty years ago, any attempt to water the land for the production of spring crops was viewed as a crime and punished accordingly, the generally accepted idea being that Providence would supply the wants of the country and to supplement the efforts of nature was wrong. This superstition, which was probably started by the notorious minister, Sālim Singh, in order to ruin the Pāliwāl Brāhmans who, generations before, had spent large sums of money on the construction of *kharīns*, has of course long exploded. Irrigation on any large scale is, however, impossible as no perennial streams exist, the wells are too deep to be used for this purpose, the country is for the most part sandy, and the rainfall is always scanty. It is only where the soil is harder and the surroundings hilly and rocky that irrigation becomes possible from *kharīns* or shallow depressions into which the rain-water flows. In a very few cases

the water thus stored is conveyed by ducts to adjacent land, but the usual custom is to sow wheat and gram in the beds of these tanks.

As already observed, the majority of the *kharīns* were constructed by the Pāliwāl Brāhmans, and from the time when these people were driven out of the State until 1892 they were entirely neglected and fell into disrepair. During the last fourteen years, the Darbār has done much to restore them and to build new ones, and the total expenditure has been approximately Rs. 82,000; some of the people have also been persuaded, by a promise of the right of cultivation and some reduction in the land revenue, to construct several of these useful irrigation works at their own cost, and to agree to keep them in good order. The result is that there are at the present time more than 500 *kharīns* in the State, of which nearly 400 are used for cultivation in years of sufficient rainfall; the principal are Bhūj and Masūrđi to the south-west of the capital, Dāiya to the north-west, and Mānchitā near Bāp in the north-east. The *kharīns* have never been surveyed, but the area of their beds and of land in the vicinity irrigable from them has been roughly estimated at about 30,000 acres or forty-seven square miles. The area actually sown with spring crops is, of course, much less and depends on the rainfall at each tank.

Rents in the proper sense of the term do not exist in the *khālsa* villages; the Darbār deals directly with the cultivators and collects its land revenue without the intervention of any middleman. In *jāgīr* estates and in those held as charitable grants (*sāsan*), the holders take as rent either a share of the produce, varying from one-fifth to one-eleventh, or a sum of Rs. 2 (local currency) for as much land as can be cultivated with a pair of bullocks.

Wages appear to have remained almost stationary during the last thirty years, and are still often paid partly or wholly in kind, especially in the cases of village artisans, agricultural labourers, domestic servants, and the horsekeepers or syces employed by the Darbār. At the present time the average monthly wages (converted into British currency) are:—ordinary labourer Rs. 3 to Rs. 4; syce Rs. 4; domestic servant Rs. 5; and mason or carpenter about Rs. 10, although skilled workmen receive more than this.

Of prices in olden days not very much is known. Tod, some seventy-five years ago, wrote:—"Bājra, in plentiful seasons, sells at one and a half maunds" (*i.e.* sixty seers) "for a rupee; but this does not often occur, as they calculate five had seasons for a good one." In 1865 the price of *bājra* was from 8 to 9 seers per rupee, and ten years later it was reported to be 27 seers against an average for the preceding decade of $13\frac{1}{2}$ seers. Table No. VIII in Vol. III-B gives the average price of certain food grains and salt since 1884, and the figures have been taken from the official publication entitled *Prices and Wages in India*; it should be remembered that the period 1891—1900 included not only two years of famine (1899-1900), which have been left out of account, but three years of scarcity. Nevertheless food grains seem to be on the whole dearer than they were sixteen or twenty years ago, and the railways, though they flap

the State on every side, are not sufficiently near to materially affect prices. In the famine of 1899-1900 the highest quotations were: wheat and gram 7 seers, *jowār* 7½ seers, and barley and *bājra* 8 seers per rupee.

The mineral products of Jaisalmer consist of salt, limestone, sandstone, *kankar* and clay.

Salt of fair quality is found in several localities, but is now manufactured only at Kānod, about twenty miles north-east of the capital. This *rann* or salt-marsh lies at the head of a rocky valley, separating the stony desert from the sandy and waterless one which extends northward to the Bahāwalpur State, and has an area of about twelve square miles. Brine is found ten feet below the surface, and is drawn from pits by the weighted pole and bucket; it is then exposed to evaporation in pans, and a small-grained white salt is obtained. By the agreement of 1879 with the Government of India the out-turn is limited to 15,000 mounds (or about 540 tons) a year, entirely for local consumption and use, and the quantity actually manufactured is said to average about 300 tons yearly.

The limestone of Jaisalmer has for centuries been famous, and was used for some of the elaborate inland work of the Tāj Mahal at Agra. The quarries are mostly within a few miles of the capital, and the stone is very fine, even-grained and compact, of a buff or light brown colour, and admirably adapted for carving. Slabs have been transported to Upper Sind and used for Musalmān tombstones, and these, although of considerable antiquity, are generally remarkable for the sharpness of the engraving. One variety of limestone was formerly employed for lithographic blocks and, though not suited for fine chalk drawings, could be used, it was said, for all other purposes with the ordinary materials; its composition was reported to be 97·5 per cent. of calcium carbonate and 2·5 per cent. of a yellow earth resembling bole, and it took a fair polish. Another variety called Abur or Hābur from the village (twenty-eight miles north-west of the capital) where it is quarried, contains large quantities of an iron ore resembling red ochre and is used for flooring the most sacred parts of temples.

Sandstone of good quality is found near Jaisalmer town and at Bhadāsar seventeen miles to the north-west; it is worked chiefly at the latter place where it is of a reddish brown colour and, being very hard, is used for making millstones.

The clays consist of fullers' earth or *Multāni mitti*, quarried at four places—Māndhan, Mandai, Nedai and Rāmgarh—in the north, used locally as a hair-wash and exported to some extent for the manufacture of the better grades of pottery; *geru*, found in small lumps in the south-east, yellow in colour and used for dyeing tents and clothes; and *seri mitti*, also found in the south-east and used as a whitewash.

The average yearly out-turn of limestone is reported to be about 1,100 tons; of sandstone 200 tons; and of the various clays 400 tons.

The manufactures are unimportant and consist of coarse cotton cloths; woollen shawls or *lois*, of fine texture and good quality, and blankets; small bags and druggets of goats' and camels' hair; and cups, platters and paper-weights of the limestone of the country.

In former times the town of Jaisalmer, from its position on the direct route between the valley of the Indus on the west and the Punjab and United Provinces to the north and east, was a commercial mart of some importance. Caravans of camels were constantly passing through the State, carrying the indigo of the Doāb, the opium of Kotah and Mālwa, the famed sugar-candy of Bikaner, and iron implements from Jaipur to Shikārpur and lower Sind, and returning with ivory, dates, cocoanuts, drugs, scented wood and dried fruits. Tod writes that the transit-duty levied on these goods at one time reached three lakhs of rupees a year, but the bad faith of the minister, the predatory habits of the Bhātis and the general decrease of commerce conspired to almost annihilate this source of income. In the famine of 1869, which affected Jaisalmer to a small extent only, no less than 235,000 camel-loads, representing over a million maunds of grain, passed through from Sind and Bahāwalpur to Jodhpur, and a large portion of the sum for which this grain was sold (some twenty-five lakhs of rupees) was taken back through the State without a single robbery or dacoity being committed. Since then, railways have been constructed on all sides and the through trade is now insignificant, the yearly receipts from transit-duty averaging barely Rs. 2,500.

At the present time, the trade is mostly with Sind, the chief exports being wool and woollen articles, *ghī*, camels, cattle, sheep, hides, fullers' earth and a little building stone; the imports include grain, cotton, sugar, opium, tobacco, oil and piece-goods. Export and port, as well as transit-duties, are still levied and bring in nearly Rs. 50,000 a year, import-duties accounting for about two-thirds of this sum. For the transport of merchandise, camels are almost always used, and the principal trading castes are the Mahājans, and to a less extent the Sheikhs and Brāhmans.

No railways traverse the State, but the North-Western Railway runs at a distance varying from thirty to ninety miles from the northern and western borders, while at a similar distance from the southern and eastern boundaries is the Jodhpur-Bikaner Railway; the station nearest to the capital is Bārmer on the line last mentioned and distant about ninety-five miles nearly due south. The length of metalled roads is 6, and of unmetalled 119 miles. The former are all at or in the vicinity of the capital, while the latter are mere sandy tracks leading to Bārmer, Pokarau and other places, and sometimes marked by mile-stones. These roads and the numerous foot-paths found everywhere are passable all the year round, but where there are shifting sands, as in the west, the track is not easy to find. An Imperial post office was established at the town of Jaisalmer in March 1888 and still exists, being the only one in the State; the mails are carried by runners to and from Bārmer railway station, the journey

occupying about twenty-eight hours. In the Bāp *hukūmat* in the north-east, letters are brought once a week to the village of the same name from the adjacent post office at Phalodi in Jodhpur. The Darbār maintains a small staff of camel *sowārs*, who carry letters, etc., twice a month to various parts of the country, an arrangement which sufficiently meets all requirements. The nearest telegraph office is at the railway station of Bārmer.

The State is visited by constant scarcities caused by short rainfall or damage done by locusts; indeed, hardly a year passes in which a failure of crops does not occur in some part of Jaisalmer. Yet the people suffer less than one would expect as emigration is an annual event, whatever be the nature of the season. Practically the only harvest is the *khariḥ*, and as soon as it is gathered, large numbers leave every year to find employment in Sind and Bahāwalpur. Further, the inhabitants are, by nature and of necessity, self-reliant, as well as indifferent, if not adverse, to assistance from the State coffers, and many of them consider it so derogatory to be seen earning wages on relief works in their own country that they prefer migration. The Darbār, though its revenue is small, has, during recent years, done a great deal to relieve distress and in the matter of repairing and constructing reservoirs for the storage of water, but a scanty rainfall means not only no crops or indifferent ones, but also difficulty in finding water for man and beast, as well as grass and fodder; and the result is that, on the first approach of scarcity, the people leave in larger numbers than usual with their flocks and herds. Emigration, consequently, has always been, and must continue to be, the main form of relief.

No detailed accounts are available of the famines or scarcities prior to 1891-92, but the State is said to have suffered severely in 1812-13 and to have been only slightly affected in 1868-69 and in 1877-78. Deficient rainfall in 1891 caused a more or less general failure of the crops and about three times the usual amount of emigration. Relief works were started but entirely failed to attract labour, and had to be completed by contract; a small sum was spent on gratuitous relief. Prices ruled high, namely, wheat about 8 seers, *bājra* 9 seers, *jowār* 10½ seers, and grass three maunds per rupee; and more than 13,000 head of cattle are said to have died, but they were probably the least valuable. The direct expenditure on relief was small (about Rs. 4,000), but, including remissions of land revenue and losses from sources other than land, this visitation cost the State about Rs. 68,000.

In 1895 the average rainfall for the whole State was 3.16 inches, and in the following year 3.46 inches; the result was a scarcity, not approaching to famine conditions, over two-thirds of the territory, the northern and western districts being worst off. In 1895-96 there was rather a deficiency of water and fodder than of grain, while in 1896-97 the reverse was the case. Relief works and poor-houses were started in December 1895 and not closed till July 1897, but the largest number on relief of either kind never quite reached 2,000 on

any one day. The price of *bājra* ranged between $8\frac{1}{2}$ and $10\frac{1}{2}$ seers, and of barley between $6\frac{1}{4}$ and 10 seers per rupee, and one-fourth of the population with more than 107,000 head of cattle emigrated. The direct expenditure on this occasion was about Rs. 40,000, but the land revenue was largely remitted and the losses from other sources were considerable. The committee of the Charitable Relief Fund at Calcutta allotted Rs. 19,000 for distribution in Jaisalmer, but it is noticeable that only Rs. 7,500 were spent, almost entirely in purchasing cattle.

The famine of 1899-1900 was the worst of which there is any record; certain districts received no rain, and the average for the State was less than an inch. This was consequently a *trikāl* or triple famine, in which grain, water and fodder were alike scarce. Between forty and fifty thousand persons emigrated, and it was estimated that the State lost about 148,000 horned cattle and more than 7,400 camels. Relief works and poor-houses were open for twelve months, and during this period 410,122 units were relieved, the largest number on relief on any one day being 1,764 towards the end of May 1900. Practically no land revenue was collected, and the Government of India came to the assistance of the Darbār with a loan of half a lakh, which sum approximately represents the direct cost of the operations. This famine is remarkable for the appearance for the first time in history of cholera which, between December 1899 and September 1900, claimed from three to four thousand victims.

The scarcity of 1901-02, though not intense, was general, and the relief measures cost the State Rs. 14,000, to meet which a further loan from the Government of India became necessary.

CHAPTER V.

ADMINISTRATIVE.

During the minority of Mahārāwal Sālīvāhan the administration is being conducted by a *Dīwān* and Council of four members under the general superintendence of the Resident, Western Rājputāna States. The State is divided into sixteen districts or *hukūmats*, in each of which is an official termed *Hākīm*. A reference to Table No. VII in Vol. III-B will show that the districts vary in size from 262 to 2,200 square miles, and that each contains on the average only about thirty villages and 4,140 inhabitants.

Jaisalmer has no code of laws of its own, and the courts are guided generally by the enactments of British India, such as the Civil and Criminal Procedure Codes and the Indian Penal Code.

The lowest courts are those of the *Hākims*; fourteen of them have powers in civil suits not exceeding Rs. 250 in value and, as magistrates, can punish with imprisonment up to fifteen days and fine up to Rs. 50, while the remaining two (at Bāp and Nokh), as well as the *Kotwāl* at the capital, try civil suits not exceeding Rs. 400 in value and can pass a sentence of one month's imprisonment and Rs. 50 fine. Appeals against the decisions of the above tribunals lie to the *Sadr* Civil or the *Sadr* Criminal court, as the case may be. Most of the smaller civil suits are referred to a *pañchāyat* of three or more members appointed by the parties concerned, the award being final, or, if the parties cannot agree, to a body known as a *sultānī pañchāyat* and nominated by the presiding judge (*Hākīm* or *Kotwāl*), but in these cases the award is not final and an appeal is allowed to the *Sadr* Civil court.

The court last mentioned tries suits beyond the powers of the *Hākims* and *Kotwāl* and up to any value, but appeals lie to the *Dīwān* and decrees for sums exceeding Rs. 5,000 are subject to the confirmation of the Resident. Here again many of the cases are decided by arbitrators chosen by the parties, and their award is final.

The *Sadr* Criminal court takes up cases beyond the powers of the *Hākims*, etc., and can sentence to imprisonment up to one year and fine up to Rs. 300; if a heavier punishment be deemed necessary, the proceedings are submitted to the *Dīwān*, to whom also appeals lie.

The *Dīwān*, besides hearing appeals against the orders of the *Sadr* Civil and Criminal courts, tries such original cases as are beyond the powers of the latter and can sentence up to two years' imprisonment and Rs. 500 fine; sentences exceeding these limits and all sentences in cases of homicide and dacoity are subject to the confirmation of the Resident.

The court of the Resident is the highest in the State; besides dealing with such cases as require its confirmation, it can call for the proceedings in any case and revise the orders passed.

The work of the courts is not heavy. During the ten years ending 1900, the average annual number of original civil suits decided was 268 (of which 250 were dealt with by subordinate courts), while the figures for 1903-04, 1904-05 and 1905-06 were 290, 409 and 387 respectively. The number of criminal cases disposed of was 251 in 1903-04, 320 in 1904-05, and 532 in 1905-06, as compared with a yearly average of 473 during the decade ending 1900.

Of the revenue of the State in former times very little is on record. Tod wrote that the personal revenue of the chief "is, or rather was, estimated at upwards of four lakhs of rupees," the chief sources being transit-duties which, it is asserted, "have amounted to the almost incredible sum of three lakhs," and land revenue; while a hearth-tax called *dhuān* (literally "smoke"), levied from every house, brought in about Rs. 20,000, and an arbitrary impost "universally known and detested under the name of *dind*, the make-weight of all their budgets of ways and means" contributed anything between Rs. 2,700 and Rs. 80,000. The yearly revenue of the nobles was roughly estimated by Tod at about two lakhs.

When the Governor-General's Agent visited Jaisalmer in 1865 to instal the late Mahārāwal, detailed accounts of the income and expenditure of the State for the previous three years were handed to him and, though probably not very reliable, showed the average revenue to be about Rs. 1,06,000 and the expenditure about Rs. 1,22,000 a year. The chief sources of income were customs-duties, land revenue, judicial fees, minting operations and a tax on houses; while the main items of expenditure were cost of administration, including civil list, Rs. 60,000, and army and police Rs. 45,000. The debts exceeded the assets by about a lakh, this sum being due partly to merchants and partly to the troops who received half of their pay monthly and the other half in arrears every third or fourth year.

During the next twenty-five years (1865-90), the ordinary revenue appears to have ranged between one and two lakhs a year and the expenditure usually exceeded the income, with the result that when Mahārāwal Bairi Sāl died in 1891 the debts, including arrears of pay, were found to amount to about 3½ lakhs. All these figures are in the local currency, the rupee of which was at that time of about the same value as the similar British coin. In the succeeding decade the ordinary revenue averaged Rs. 1,57,000 in the local currency, which had greatly depreciated in exchange value, but a series of bad or indifferent seasons commencing from 1895 has not only reduced the receipts, particularly under customs and land revenue, but has necessitated much extraordinary expenditure, to meet which the Darbār has had to borrow money from the Government of India and in the open market.

At the present time, the ordinary *khālṣa* or fiscal revenue of the State may be said to be nearly a lakh of rupees (*Imperial) a year, derived chiefly from customs (Rs. 45,000), land revenue (Rs. 15,000), grazing fees (Rs. 7,000), court-fees and fines (Rs. 6,000) and salt

* 150 local rupees have been assumed to be equal to 100 British; the rate of exchange, however, fluctuates almost daily.

(Rs. 5,000). Similarly the ordinary expenditure may be put at about Rs. 85,000 (*Imperial), the main items being cost of administrative staff, civil and judicial, Rs. 20,000; army and police Rs. 18,000; privy purse and palace, including cost of the Mahārāwal's education, Rs. 12,000; stables, including bullocks, camels and elephants, Rs. 10,000; and allowances to relatives of the chief Rs. 6,000. The debts now amount to about Rs. 2,40,000, the Government of India being practically the sole creditor, and the realisable assets, including cash balance in the treasury, are estimated at Rs. 53,000.

The income derived by *jāgīrdārs* and others from the land which they hold on favoured tenures is believed to be about Imperial Rs. 50,000 in an ordinary year, thus making the total revenues of the State approximately a lakh and a half.

The local currency is called Akhai Shāhi after Rāwal Akhai Singh, who is said to have established a mint at his capital in 1756 in defiance of orders from Delhi, but his successor Mulrāj obtained the necessary sanction from Shāh Alam II. Prior to 1756, Muhammad Shāhi coins were the circulating medium. The old Akhai Shāhi rupee weighed 168.75 grains and contained only 4.22 grains of alloy, but the issue gradually deteriorated until the alloy reached as much as twelve per cent. Thākur Kesri Singh, who was minister about forty years ago, tried to restore the purity, but as he at the same time reduced the weight of the coin, his action was distrusted, and he was obliged to abandon the attempt.

The silver coins may be divided into two groups, namely those bearing the name of Muhammad Shāh and those bearing that of Her late Majesty. The latter consisted of the rupee, and eight-anna, four-anna and two-anna bits, and were struck in 1860, though not brought into circulation until 1863. The inscriptions on either side are in Persian, that on the reverse being to the effect that the coin was minted "in the 22nd year of Her fortunate reign"—an obvious mistake for the 24th year; the special mint marks are circles of dots, the *pālam* (a sacred bird), and the *chhātā* or regal umbrella. The rupee weighs about 162½ grains, and only ten years ago was worth more than fifteen Imperial annas, but it now exchanges for between ten and eleven annas; its value fluctuates almost daily and has been as low as nine annas. The depreciation of the Akhai Shāhi rupee is ascribed to imprudent over-coinage in former times, to the closure of the Government mints to the unrestricted coinage of silver, and to a series of bad years. A failure of the crops means an increased demand for the Imperial rupee wherewith to purchase grain in Sind, and this increased demand means a fall in the exchange value of the local currency. The Jaisalmer mint has not been worked since 1899, and the Akhai Shāhi rupees are to be converted on the first favourable opportunity.

The copper coinage is known as Dodiā; it is said to have been first struck in 1660 and there was a further issue about 1836. Each

*150 local rupees have been assumed to be equal to 100 British; the rate of exchange, however, fluctuates almost daily.

coin weighs from eighteen to twenty grains, and forty go to an anna. Gold *mohurs* and smaller pieces have been minted in small numbers since 1860, and are said to be of pure gold. The inscription is the same as on the later silver coins, and the *mohur* weighs 167 grains.

The land revenue system is primitive, having undergone no changes for a long period, and neither a survey nor a settlement has been made. In a few places the revenue is paid in cash at Rs. 2 (local currency) for as much land as can be cultivated with a pair of bullocks, the tax being called *halota* from *hal* (a plough); but throughout the State payment in kind is most common. Where wheat or gram is grown, the Darbār takes from one-fifth to one-sixth of the produce, and of the rain crops from one-fifth to one-eleventh. There are four different modes of estimating the Darbār's share of the out-turn. In the first (*kankūt*), the crop is valued when standing; in the second (*kari kūnta*), when cut but before threshing; in the third (*lātā*), after the crop has been threshed out; and in the fourth (*kāngar kūnta*), from the condition of the bare standing stalks. In addition to the portion payable to the State, the cultivator has to settle the demands of certain officials and servants, such as the keeper of the *kothār* or State granary, the chief's water-carrier, and the man told off to watch the crops in the Darbār's interests; these demands collectively amount to about one-half of what is taken by the State. For example, if the out-turn be one hundred maunds and the State's share one-tenth, then ten maunds would go to the Darbār, five to the above officials and eighty-five maunds to the cultivator.

Of the 471 villages in Jaisalmer, 239 are *khālsa*, 109 are held on the *jāgīr* tenure, 99 in *bhām*, and 24 are *sūsan* or charitable grants.

In the *khālsa* area the Darbār retains all its proprietary rights in the land and deals directly with the *ryots* or cultivators; in the rest of the territory it has transferred those rights, temporarily or permanently, to some individual, subject to certain conditions.

The *jāgīrdārs* may be divided into three main groups, namely (i) the Rājwīs, or near relatives of the chief, who, besides possessing one or more villages, receive fixed monthly allowances; (ii) the Raolots or more distant relations of the chief; and (iii) the ordinary Thākurs. All have to serve the Mahārāwal when called upon and present him with a horse on certain occasions such as his installation and marriage, and some pay a fee called *neota* on themselves succeeding to their estates. The tenure seems to differ from that ordinarily found in Rājputāna in that, except in the case of the Rao of Bikampur, no annual tribute is paid, and it is not the custom, on the death of a *jāgīrdār*, to issue a fresh title-deed or *pattā* in favour of his eldest son or heir; the majority of the *jāgīrdārs* may be said to hold in perpetuity, though they can of course be dispossessed for contumacy or any grave offence. There are, however, eleven villages which are held under title-deed, and ten as a reward for services rendered; the holders pay nothing, are liable for service, and retain their estates at the pleasure of the Darbār.

A list of the more important *jāgīrdārs* will be found in Table No. IX in Vol. III-B; all except the Thākūr of Khuri belong to the Bhāti clan, which is divided into a number of septs known as Barsang, Khiān, Tejmatot, Prithwīrajot, Dwārkadāsot, Udai Singhot, etc. Among the first two of these subdivisions, the eldest son succeeds his father, and his brothers, if he has any, are allowed to cultivate, free of rent, as much land as they can themselves, or they may employ one or two men and cultivate through them; among the remaining septs the law of gavelkind prevails, and copartners in a village are often very numerous, the property of each consisting sometimes of one or two fields.

The *bhāmīās*, or those holding on the *bhām* tenure, have to render service when called on, receiving remuneration for the same, and pay a small cess yearly as well as an additional sum on certain special occasions; provided these payments are punctually made, they are left undisturbed in their possessions.

Lands are granted on the *sāsam* tenure in charity or from religious motives to Brāhmans, Chārāns, Bhāts, etc., and enjoy complete immunity from all State dues; they are to all intents and purposes grants in perpetuity. In former times, these villages were considered as outside the Mahārāwal's jurisdiction, and if a criminal fled to any of them for refuge, he found a sanctuary.

The miscellaneous revenue is derived from opium, salt and exoise, and averages about Rs. 11,000 or Rs. 12,000 yearly.

The poppy is of course not cultivated in Jaisalmer, and all the opium consumed in the State is imported *viā* Bārmer (on the Jodhpur-Bikaner Railway) where, under an arrangement with the Jodhpur Darbār, the import-duty is levied. This duty, formerly Rs. 26 per maund, was raised to Rs. 80 in 1882 and to Rs. 100 (Imperial) in 1893; and of the sum last mentioned the Jodhpur Darbār retains Rs. 5. A good deal of opium used to be imported—for example, the receipts during the six months ending February 1884 exceeded Rs. 20,000—but, with bad times, the demand for the drug has decreased and the receipts are now about Rs. 5,500 yearly. This import-duty is the sole source of revenue in connection with opium as no license-fees are demanded from the wholesale or retail shops.

The salt consumed in the State is all manufactured at Kānod; the yearly income derived from the sale of the commodity is about Rs. 5,000, and the average annual consumption per head is said to be a little more than two seers.

The excise revenue is insignificant, consisting of a few hundred rupees paid yearly by a contractor who has the sole right of selling spirits. The people prefer opium, but those who take liquor are quite content with the local variety.

No regular Public Works department exists, but an overseer is permanently employed and sees to the repairs of roads and buildings, the ordinary expenditure being about Rs. 1,500 a year or less. The only works of any note carried out during the last fifteen years have been several *kharāns* or tanks for storing water; a comfortable house

outside the town-wall, which cost about Rs. 30,000 and is available for guests; the hospital and lunatic asylum (about Rs. 3,200); and the cenotaph of the late Mahārāwal (about Rs. 4,000).

The military force maintained by the State numbers about 220 of all ranks, namely, 39 *sowārs*, mostly mounted on camels, 168 foot-soldiers and 13 gunners, and costs about Rs. 10,000 a year. The men are armed with swords and ordinary smooth-bore matchlocks, and are neither trained nor drilled; they are employed as guards and escorts, and often perform police duties. Out of twenty-five pieces of ordnance, seventeen are said to be serviceable.

The strength of the police force is about 140 men, half of whom are mounted on camels, and the yearly cost is about Rs. 8,000. The police and the army are hardly distinguishable, as the one frequently assists the other. Adding the two forces together, we get a total of 360 men, or about one policeman for every forty-five square miles of country and for every 204 inhabitants.

The State possesses a jail at the capital and small lockups at the headquarters of the various districts; the latter are under the supervision of the *Hākims*, and are intended only for persons who are under trial or who have been sentenced to short terms of imprisonment. Up to about twenty years ago, prisoners at the capital were confined in insanitary cells in the basement of the fort or in such other places as the authorities selected; the present building, although not originally meant for a prison, has been altered and improved from time to time and is now fairly comfortable, well ventilated and well kept. It has accommodation for 88 persons (eighty males and eight females), and the daily average strength since 1894 (when returns were received for the first time) has been about 48. The yearly cost of maintenance varies between Rs. 1,200 and Rs. 2,500 (British) and averages about Rs. 1,500; there are no jail industries of importance. Some further details will be found in Table No. X in Vol. III-B, and in explanation of the high death-rate in 1900, it may be said that it was a year of famine and that eight of the twelve deaths were due to cholera.

At the last census 2,164 persons or 2.95 per cent. of the people (namely 5.38 per cent. of the males and 0.13 per cent. of the females) were returned as able to read and write. Thus, in regard to the literacy of its population, Jaisalmer stood tenth among the twenty States and chiefships of Rājputāna. Of the three main religions, the Jains are, as usual, first with 21½ per cent. literate, the Hindus follow at a considerable interval with 3½ per cent., and the Musalmāns are last with only 0.27 per cent. The number literate in English was eighteen.

Up to about 1890, the only schools in the State were of the indigenous type, the teachers being mostly Jatis or Jain priests; these institutions have held their own, and are still much appreciated, especially by the trading castes who are generally content with a little knowledge of the vernacular and the native system of arithmetic and accounts for their sons. In 1890 three schools were opened by the Darbār, namely two at the capital (in one of which an attempt was

made to teach some English but was not persevered in) and the third at Bāp ; but they were never popular, and the number on the rolls of all three institutions in 1901 was only about seventy. Since then, although there are still but three schools, considerable progress has been made ; the teaching of English has been resumed at the capital, and the staff generally is more efficient. The number on the rolls at the end of October 1906 was 180 as compared with 91 on the 31st March 1904 and 183 on the 31st March 1905, and the daily average attendance was 47 in 1903-04, 112 in 1904-05, and 107 during 1905-06. The schools are all for boys, and no fees are charged anywhere. The expenditure on education, now about Rs. 1,100 a year, is met from a small tax on *bājra*, *jowār* and *ghā* brought into Jaisalmer town.

The State maintains a hospital at the capital, and it was opened in April 1892 ; for three years there was no accommodation for indoor patients but six beds were provided in 1895-96. In Table No. XII in Vol. III-B will be found a full account of the work done ; about 4,700 cases (thirty-seven being those of in-patients) are treated yearly, and some 250 operations are performed. The daily average number of in-patients attending is three, and of out-patients sixty-one, while the cost of maintaining the institution is about Rs. 2,300 yearly.

Formerly insane persons were lodged in the jail, but a comfortable lunatic asylum was built just outside in 1898-99. It is, however, very little used as insanity is rare.

Vaccination was started for the first time in December 1890, and has been carried on with considerable success ever since (see Table No. XIII in Vol. III-B), though a falling off is noticeable during the last three seasons. The children of the capital and some adjacent villages are now well protected, but it is not easy to reach the semi-nomadic population of the outlying districts. The total number of persons successfully vaccinated was 150 in 1890-91, 3,124 in 1894-95, 2,105 in 1900-01 and 818 in 1905-06, or about 1·4, 27, 18·2, and 11 per 1,000 of the population respectively. The average cost of each successful case has varied between fourteen pies in 1894-95 and ten annas in 1905-06.

The system of selling pice packets of quinine has been in force for some time, but the sales are very small, and in 1905-06 only seven packets of 7-grain doses each were disposed of.

The State was surveyed by the Great Trigonometrical Survey of India between 1873 and 1880, and is included in what are known as the Jodhpur and the Eastern Sind Meridional Series. The territory was also topographically surveyed by the Survey of India between 1881 and 1883, and the area, as calculated in the Surveyor-General's office by planimeter from the standard sheets, is 16,062 square miles.

CHAPTER VI.

JAISALMER TOWN.

The town of Jaisalmer, the capital of the State of the same name, is situated in $26^{\circ} 55'$ north and $70^{\circ} 55'$ east, about ninety-five miles north of Bärmer station on the Jodhpur-Bikaner Railway, and approximately 1,200 miles north-west of Calcutta and 600 north of Bombay. It was founded in 1156 by Rāwal Jaisal, whence its name—the *meru* or hill-fort made by Jaisal.

The population at each census was 10,965 in 1881, 10,509 in 1891, and 7,137 in 1901; the decrease of thirty-two per cent. since 1891 was due chiefly to a severe outbreak of cholera which, between the 20th June and the 16th July 1900, carried off 2,154 persons. In 1901 Hindus numbered 5,371, or more than seventy-five per cent. of the total; Musalmāns 1,349 or nearly nineteen per cent.; and Jains 232.

The town stands at the southern end of a low range of hills, and is surrounded by a stone wall about three miles in circuit, ten to fifteen feet high, five to seven feet thick, and strengthened by bastions and corner towers. Within this wall, on an isolated hill to the south, is the fort which is about 250 feet above the surrounding country and 500 yards long by 250 wide at its greatest diameter.

The two main entrances to the town, the Amarsāgar gate on the west and the Gharsisar gate on the east, are connected by a metalled and paved road which is the principal thoroughfare; it is fairly wide in most parts, and near the custom-house opens out and is used as a market-place. The other streets are chiefly narrow and dusty alleys—narrowest where some of the finest houses stand, as the well-to-do were able to encroach on them when rebuilding or improving their residences. A large portion of the space within the walls is unoccupied, but the ruins lying about prove that the place must have been far more populous in former times. Water is obtained chiefly from the Gharsisar tank, 300 yards south-east of the gate of the same name and said to have been constructed by Rāwal Gharsi nearly six hundred years ago, and also from wells, the best of which is behind the jail. There are several other tanks, but they rarely hold water after the rains have ceased, and then only in small quantities.

The hill on which the fort stands is entirely covered by buildings and defences, and the base is surrounded by a buttress wall of solid blocks of stone about fifteen feet high, above which the hill projects and supports the ramparts. The bastions are in the form of half towers, surmounted by high turrets and joined by short thick walls; these again support battlements which form a complete chain of defence about thirty feet above the hill. The view from the ramparts is not attractive; the foreground presents a succession of sterile, rock-bound ridges, barely clad with stunted bushes, while, on the horizon, low undulations mark

the commencement of the Indian desert. The fort is approached from the town by four gates, called respectively the Akhai Pol, Ganesh Pol, Būta Pol and Hawā Pol. The Mahārāwal's palace, the top of which is 957 feet above the sea, surmounts the main entrance, and is an imposing pile crowned by a huge umbrella of metal mounted on a stone shaft, a solid emblem of dignity of which the Bhāti chiefs are justly proud; but the interior is ill-arranged and space is frittered away in numberless small apartments. The water-supply is derived from five wells, varying in depth from 236 to 300 feet; the best well, known as Jaisalu, never fails and the water is excellent. Within the fort are four Vaishnava and eight Jain temples. Of the former, one is said to have been built in the twelfth century by Rāwal Jaisal and is called Ad-Nārāyan's or Tikāmji's temple, while another, ascribed to Rāwal Lākhan, is remarkable as possessing gold and silver plated shutters. The Jain temples, especially that dedicated to Pārasnāth, are very fine, the carving in them being exquisite; tradition says that one or two of them are 1,400 years old, but this is extremely improbable as the town and fort were only founded 750 years ago, and it is believed that the oldest, that to Pārasnāth, was built about 1332 by one Jai Singh Cholasāh.

The citadel, town-wall and all the principal houses, being built of the yellow limestone of which the hill itself is composed, have at a distance a sombre appearance from the want of a variety of colours to relieve the eye; and, indeed, it is hard to say at the first view which is the native rock and which are the artificial buildings, for the former is flat-topped and the latter are flat-roofed. But on closer inspection, it will be seen that an immense deal of labour has been expended on the architectural decorations of most of the houses, the fronts of which are ornamented with richly carved balconies and lattices. One of the finest buildings is the house of the notorious *Dīwān*, Sālim Singh, who devastated the country about a hundred years ago with his extortions and cruelty; it is six storeys in height, and contains much ornamentation, especially on the top storey.

The town possesses a post office, a jail which has accommodation for eighty-eight prisoners, a small lunatic asylum, a couple of schools in one of which English is taught, and a hospital with beds for six in-patients.

BIBLIOGRAPHY.

A. Dow.—*History of Hindustān*, London, 1792.

J. Tod.—*Annals and antiquities of Rājasthān*, Vol. II, London, 1832.

J. Sutherland.—*Sketches of the relations subsisting between the British Government and the different Native States*, Calcutta, 1837.

R. H. Irvine.—*Some account of the general and medical topography of Ajmer*, Calcutta, undated but published about 1840.

M. Elphinstone.—*History of India*, Vol. II, London, 1841.

E. Thornton.—*Gazetteer of the East Indian territories*, London, 1857.

J. Prinsep.—*Essays on Indian antiquities*, London, 1858.

Rājputāna Agency administration reports, annually from 1865-66.

H. M. Elliot.—*History of India*, Vols. I and V, London, 1867 and 1873.

Reports on sanitation, dispensaries, jails and vaccination in Rājputāna, annually from 1872-73.

H. Blochmann.—*Ain-i-Akbarī*, Vol. I, Calcutta, 1873.

A. Cunningham.—*Archæological Survey of Northern India* Vol. II, Calcutta, 1874.

G. B. Malleon.—*The Native States of India*, London, 1875.

C. K. M. Walter.—*Gazetteer of Jeysulmcre*, Calcutta, 1877.

Rājputāna Gazetteer, Vol. II, Calcutta, 1879.

Rājputāna Census Reports, 1881, 1891 and 1901.

Great Trigonometrical Survey of India, Vol. VII.A, Dehra Dūn, 1887.

Report on the relief operations undertaken in the Native States of Mārwar, Jaisalmer, etc., in 1891-92, Bombay, 1892.

G. U. Aitchison.—*Collection of treaties, engagements and sanads*, Vol. III, Calcutta, 1892 (under revision).

R. D. Oldham.—*Manual of the geology of India*, Calcutta, 1893.

W. W. Webb.—*Currencies of the Hindu States of Rājputāna*, Westminster, 1893.

Report on the relief operations in the Western Rājputāna States during 1896-97, Jodhpur, 1897.

A. Adams.—*The Western Rājputāna States*, London, 1899.

C. M. Duff.—*Chronology of India*, Westminster, 1899.

Report on the famine in Rājputāna in 1899-1900, Ajmer, 1901.

F. Ashton.—*The salt industry of Rājputāna*, see *The Journal of Indian art and industry*, Vol. IX, January 1901.

Jaisalmer State administration reports, annually from 1901.

Chiefs and leading families in Rājputāna, Calcutta, 1903.

PART II.

JODHPUR STATE OR MARWAR.

JODHPUR STATE.

CHAPTER I.

PHYSICAL ASPECTS.

Jodhpur is by far the largest State in Rājputāna, having an area of 34,963 square miles or more than one-fourth of that of the entire Province. It lies between the parallels of $24^{\circ} 37'$ and $27^{\circ} 42'$ north latitude, and $70^{\circ} 5'$ and $75^{\circ} 22'$ east longitude. Its greatest length from north-east to south-west is about 320 miles, and its greatest breadth 170 miles.

Area,
position
etc.

It is bounded on the north by Bikaner; on the north-west by Jaisalmer; on the west by the Thar and Pārkar District of Sind; on the south-west by the Rann of Cutch; on the south by Pālanpur and Sirohi; on the south-east by Udaipur; on the east by Ajmer-Merwāra and Kishangarh; and on the north-east by Jaipur.

Boundaries.

The State is sometimes called Jodhpur after its capital, which was founded by and named after Rao Jodha in 1459, and sometimes Mār-wār. The latter word is a corruption of *Maru-wār*, classically *Maru-sthala* or *Marusthān*, meaning the region of death, and hence applied to a desert; another form of it was *Marudesa*, whence the unintelligible *Mardes* of the early Muhammadan writers. In former times, Mār-wār included about half of Rājputāna, and Abul Fazl thus described it in 1582:—

Meaning of
name.

"Mār-wār is in length one hundred, and in breadth sixty *kos*. The *sarkārs* of Ajmer, Jodhpur, Sirohi, Nāgaur and Bikaner are dependent on it. The Rāthor tribe have inhabited this division for ages past. Here are many forts of which the following are the most famous, namely Ajmer, Jodhpur, Bikaner, Jaisalmer, Umarnkot and Jainagar." In Tod's *Annals and Antiquities of Rājasthān* it is said that "its ancient and appropriate application comprehended the entire desert from the Sutlej to the ocean."

The country, as the name Mār-wār implies, is sterile, sandy and inhospitable, but improves gradually from a mere desert in the far west and north to comparatively fertile and habitable lands in the north-east, east, and south-east in the neighbourhood of the Arāvalli hills. The "great desert," forming the whole of the Jodhpur-Sind frontier, extends from the edge of the Rann of Cutch beyond the Lūni river northward, and between it and what has been called the "little desert" on the east is a zone of less absolutely barren country, consisting of rocky land cut up by limestone ridges, which to some degree protect it from the desert sands. The general aspect is that of a dreary waste covered with sand-hills, shaped generally in

Con figura-
tion.

long straight ridges, which seldom meet but run in parallel lines, separated by short and fairly regular intervals, resembling the ripple marks on a sea-shore upon a magnified scale. Some of these ridges may be two miles long, and vary from 50 to 400 feet in height; their sides are scoured by water, and at a distance they look like substantial low hills. Their summits are blown into wave-like curves by the action of the periodical westerly winds; they are sparsely clothed with stunted shrubs and tufts of coarse grass in the dry season, and the light rains cover them with vegetation. The desolation becomes more absolute and marked as one proceeds westwards, and of the northern and north-western portion, known as the *thal*, it has been said that there are "more spears than spear-grass heads," and "blades of steel grow better than blades of corn." Villages are few and far between, cultivation is everywhere poor and precarious, and water is exceedingly scarce, often 200 to 300 feet below the surface and generally brackish. A well measured by an officer of the Great Trigonometrical Survey of India at the village of Bhākri (in the Phalodi district) in 1874 was found to be 450 feet in depth and 5 feet 4 inches in diameter.

Scattered over the State are numerous isolated hills varying in height from 1,000 to 2,000 feet above the sea, and several small ranges, offshoots of the Arāvallis, are to be found in the south, notably the Sūnda hills (Jaswantpura) where a height of 3,252 feet is attained, the Chappan-kā-pahār near Siwāna (3,199 feet), and the Rojā hills at Jālor (2,408 feet).

The Arāvalli hills, already described to some extent in Volumes I-A and II-A of this series, mark the entire eastern boundary from near the Sāmbar lake in the north-east to the Sirohi and Udaipur borders in the south-east. The highest peak within Jodhpur limits is 3,607 feet above sea-level, and is situated about thirteen miles east of Nānā station on the Rājputāna Mālwa Railway. These hills, which have been identified as the *apocopi montes, deorum poena appellati* of Ptolemy and the *Paripatra* of the *Vishnu Purāna*, are fairly well wooded, especially on the Jodhpur or western side where the slope is more abrupt and the rainfall is usually heavier than on the east. The principal passes leading down into Mārwar are those at Barr and Dewair in Merwāra, and the Paglia Nāl above Desuri a little further to the south-west; the first of these is metalled throughout and forms part of the Agra-Ahmadābād road. *Bale buthi tale tuthi*, meaning "the rainfall of the Arāvallis benefits the plains below" is a not uncommon saying in Mārwar, and indeed these hills form one of the watersheds of India, and supply some of the most distant sources of the Gangetic drainage, while the rain which falls on the western slopes finds its way by the Lūni into the Rann of Cutch.

Rivers play a very subordinate part in moulding the surface features of the country. The only important river is the Lūni; it has several tributaries, the chief being the Līri, the Raipur Lūni, the Guhiya, the Bāndi, the Sukri and the Jawai on the left bank, and the Jōjri on the right, but none of them is perennial.

Lūni.

The Lūni or salt river, the *Lonavāri* or *Lavanavāri* of Sanskrit writers, rises in the hills south-west of Ajmer city in $26^{\circ} 25' N.$ and $74^{\circ} 34' E.$, and is first known as the Sāgarmati. After passing Govindgarh in the Ajmer District, it is joined by the Sūrsuti (Saraswati) which has its source in the sacred lake of Pushkar, and from this point it is called the Lūni; it at once enters Jodhpur territory and, after a course of about 200 miles generally west by south-west, is finally lost in the marshy ground at the head of the Rann of Cutch ($24^{\circ} 40' N.$ and $71^{\circ} 15' E.$). It receives the drainage brought by the mountain torrents down the western slopes of the Arāvalli hills between Ajmer and Abu, and is a veritable blessing to the southern districts of Jodhpur. It is for the most part merely a rainy weather river, and in the hot months inclons and the *singhāru* nut (*Trapa bispinosa*) are grown in considerable quantities in its dry bed. The banks range from five to twenty feet in height, and are in parts covered with bushes of *jhao* (*Tamarix dioica*). In heavy floods, which, however, are rare, the river overflows its banks in the districts of Mallāni and Sānchor; the local name of the overflow is *vel*, and on the soil thus saturated fine crops of wheat and barley are grown. The Lūni is, however, most capricious and erratic; on one bank it may be a blessing, on the other a curse. As far as Bālotra the water is generally sweet, but lower down it becomes more and more saline in character till, on the edge of the Rann of Cutch, the three branches of the river are described as reservoirs of concentrated brine. Drinking water is obtained from November to June from wells sunk on the banks to a few feet below the level of the bed, and from these wells considerable tracts are irrigated. This has given rise to the local proverb that half the produce of the country, so far as cereals are concerned, is the gift of the Lūni.

By means of a dam thrown across the river near the town of Bilāra, one of the largest artificial lakes in India has been formed. It is called Jaswant Sāgar after the late chief of Jodhpur, and can, when full, irrigate more than 20,000 acres. Its catchment area is 1,300 square miles; surface area (when full) eleven square miles; capacity 3,800 million cubic feet; greatest depth forty feet; and length of canals and distributaries forty miles. The total expenditure to the end of September 1906 was rather more than nine lakhs; the yearly revenue since the work was completed in 1895-96 has averaged about Rs. 24,000, and the annual cost of maintenance, apart from capital expenditure, Rs. 2,500.

Lūli.

The first important tributary of the Lūni appears to be the Lūli; it rises in the Arāvallis west of Beāwar, and flows north by north-west till it reaches the small town of Rās, when the hills turn it to the south-west, but, after receiving the Sukri on its left bank, it resumes its north-westerly course and, passing Nīmāj, falls into the Lūni near the village of Nimbol.

The Raipur Lūni has its source in the Merwāra hills and flows north by north-west to the village of Raipur, after which it is named; Raipur Lūni.

here it is crossed by the Rājputāna-Mālwa Railway, and it then continues north-west past Bilāra.

The Jojri is the only stream of any size that joins the Lūni from the north. It rises in the Merta district and flows south-west for about fifty miles past the town of Pipār.

The Guhiya or Guhiya Bāla has its source in the low range of hills south of Bilāra and, after flowing south-west for nearly twenty miles, is joined by the Sukri or Sukli. A little lower down at Dholera it has been dammed to form a reservoir called Sardār Samand, after the present Mahārājā; it continues in a generally westerly direction and, after receiving the Phumphāria and Bāndi on its left bank and the Reria on its right, it unites with the Lūni at Dūnāra. Near Rohat station it is crossed by the Jodhpur-Bikaner Railway, and in former times used to interfere considerably with the traffic, occasionally detaining the trains for a whole day. The Sardār Samand mentioned above is formed by three earthen dams which have a total length of 27,252 feet and a maximum height of $31\frac{1}{2}$ feet. The tank is capable of irrigating about 18,000 acres, but the area irrigated yearly since its completion in 1902 has, owing to deficient rainfall, averaged only about 3,000 acres. The catchment area is 800 square miles; surface area (when full) thirteen square miles; capacity 3,500 million cubic feet; greatest depth $25\frac{1}{2}$ feet; and length of canals and distributaries thirty miles. The total outlay on this work to the end of September 1906, including four lakhs spent during the famine, was nearly eight lakhs, while the yearly revenue and cost of maintenance have averaged Rs. 12,000 and Rs. 1,700 respectively.

The Bāndi, already mentioned as an affluent of the Guhiya, rises to the south of Sojat and flows west past the important town of Pāli, where its waters are used for dyeing purposes; it has a total length of about fifty miles. A large irrigation tank is now under construction three miles south of Pāli, and is expected to cost about three lakhs; its estimated capacity is 1,360 million cubic feet, and the maximum depth will be twenty-three feet.

The Sukri, a very common name for a river in these parts, comes from the Arāvalli hills south of Desuri, and flows north-west past that town and Chānod, eventually joining the Lūni just above Samdari. It is crossed by the Rājputāna-Mālwa Railway at Rāni, and near the village of Bānkli it is dammed so as to form a reservoir called the Edward Samand after His Majesty. The catchment area is 450 square miles; surface area (when full) six square miles; capacity 970 million cubic feet; greatest depth twenty-two feet; and the present length of canals and distributaries is $5\frac{1}{2}$ miles. The work was completed in 1906 at a cost of about $3\frac{3}{4}$ lakhs, including rather more than two lakhs of famine expenditure; it is capable of irrigating 6,000 acres, and is expected to bring in a yearly revenue of approximately Rs. 5,000.

The last but not the least important tributary of the Lūni is the Jawai. Rising in the south-eastern corner of the State, it first flows north close to Nāna and Bera, and next north-west along the Jodh-

pur-Sirohi border past Erinpura cantonment; after leaving Ahor on its right and Jālor on its left, it bends to the west and eventually finds its way into the Lūni a little above Gūrha. It receives many feeders, including two bearing the name of Sukri, and, when in flood, is of considerable breadth, particularly at Erinpura where it is sometimes impassable. It is proposed to dam this river near Erinpura Road station and form a reservoir capable of storing some 6,000 million cubic feet of water.

Lakes.

The natural lakes are all saline, the principal being at Sāmbhar, Didwāna and Pachbhadra; they are described in Chapter XXII below. Small depressions of the same kind exist at Kuchāwan, Phalodi, Pokaran and other places. There are also a few *jhils* or marshes, notably one near Bhatki in the Sānchor district in the south-west, which covers an area of forty or fifty square miles in the rainy season, and the bed of which, when dry, yields good crops of wheat and gram. Of artificial tanks, three of the largest have been mentioned, namely the Jaswant Sāgar, the Sardār Samand, and the Edward Samand; other useful ones are Bālsamand, Kailāna and Chopāsni near the capital, and those at Chopra and Khārda.

Geology.

The oldest rocks found in the State are schists belonging to the Arāvalli system; calcareous bands are of common occurrence among them, and, where these are in contact with veins of intrusive granite, they have been altered into a pure white crystalline marble which has been extensively quarried at Makrāna and in smaller quantities at Sārangwa.

Resting unconformably upon the schists is a great series of ancient subaërial rhyolites with subordinate bands of conglomerate, named after the Mallāni district in which they were first discovered; they cover a large area in the west, and extend to the capital. The subaërial character of the lavas is proved by the inclusion between the flows of bands of rolled pebbles of the lavas themselves and other crystalline rocks derived from the Arāvalli range. The rhyolites are pierced by dykes and bosses of granite of two varieties, one containing hornblende but no mica (Siwāna granite) and the other both hornblende and mica (Jālor granite). Both these granites form considerable mountain masses, the former the Saora range south of Siwāna rising to over 3,000 feet above sea-level, and the latter the Rojā hills west of Jālor. The rhyolites are also traversed by numerous dykes of basic igneous rock, having the composition of olivine, dolerite or diabase. An intrusive rock of a very different kind occurs to the east of Bārmer, and contains cogirine, augite, sanidine and sodalite.

Near Jodhpur sandstones of the upper division of the Vindhyan system are found resting upon the Mallāni lava-flows, generally with a conglomerate at the base; the sandstones are largely used for building purposes. Some curious markings have been found at certain horizons in these stones near the village of Osiān, thirty miles north of Jodhpur, which may be of organic origin, but no indubitable fossils have ever been discovered in them.

assistance than protection from camels and goats. In the most favoured tracts, the most important indigenous timber tree is the *babāl* (*Acacia arabica*), the leaves and pods of which are used as fodder in the hot weather, while the bark is a valuable tanning and dyeing agent, and the gum is exported in considerable quantities. Among other trees may be mentioned the *malkhā* (*Bassia latifolia*), esteemed for its timber and the flowers from which country liquor is distilled; the *dhāk* or *palās* (*Butea frondosa*); the *dhāt* (*Azadirachta indica*), the wood of which is largely used for agricultural implements; the *gēlar* (*Ficus glomerata*), a common species of wild fig and attractive to bears; the *jāmūn* (*Eugenia jambolana*), affording excellent shade; the *kardīn* (*Strobilanthes arvensis*), a fine tree when its large palmate leaves come out after the rains; the *allo* (*Boswellia thurifera*), which produces scented gum and is valuable for its timber; the *amul* or cotton-tree (*Bombax malabaricum*); the *siris* (*Albizia Lebbek*), the heart-wood of which is hard and black, and is used for ornamental carving; and the *timra* (*Diospyros tomentosa*), which produces ebony. The *pīpal* (*Ficus religiosa*), a sacred tree, is found in almost every village, and the *bar* (*F. bengalensis*) and *tamarind* are fairly common throughout the plains.

The principal fruit trees are the *anār* or pomegranate (*Punica granatum*), the Jodhpur variety of which is celebrated for its delicate flavour, and the *nīmḃā* or lime tree; while the most important shrub is *anarā* (*Cassia auriculata*), which covers extensive tracts in Godwār in the south-east and gives shelter to small game, its bark being largely used in tanning.

Turning now to the desert, the chief trees are two species of the *ber* (*Zizyphus jujuba* and *nummularia*), which flourish even in years of scanty rainfall, and furnish the main fodder and fruit supply of this part of the country. The *khajr* is not less important, as its leaves and shoots provide the inhabitants with vegetables (besides being eaten by camels, goats and cattle), its pods are consumed as fruits, its wood is used for roofs, carts and agricultural implements or as fuel, and its fresh bark is, in years of famine, stripped off and ground with grain to give the meagre meal a more substantial bulk. The *ak* or *akri* (*Calotropis procera*) is the flowering shrub of the desert; it is in bloom for many months of the year, and its leaves are always green in the hottest weather; the cotton-like substance which surrounds its roots is used for stuffing pillows and quilts, its wood for roofs and cattle enclosures or as fuel, and the acrid juice of its green shoots as a medicine. Another useful shrub is the *hair* (*Capparis opulenta*), which provides a valuable fodder for camels and goats, and a durable timber to the peasant; its crimson flowers light up the sandy waste in March and April, and its fruit is eaten. Among other shrubs may be mentioned *phaj* (*Calligonum polygonoides*), on which camels have to subsist for the greater part of the year, and two cactaceous-looking sponges called *thor* (*Euphorbia Royleana* and *perissifolia*) which form efficient hedge-rows.

Of grasses the following are common in the fertile tract and are more or less good as fodder: *laru* (*Styphnum halepense*); *ekhenkī* (*Paspalum hirtum*); *harar* (*Isidema laxum*); *dhāman* (*Pennisetum rachodes*); *jāgī* (*Andropogon foveolatus*); and *ārūvalla* (*Heteropogon contortus*), which can, it is said, be stacked for a dozen years without fear of deterioration. *Dib* or *busha* (*Eriogonum cynosuroides*) is mostly used in the performance of religious rites and is fit to serve as fodder only when other grass is scarce; *szara* (*Ischarrum laxum*) is one of the best fodder grasses, and can be used for ropes, mats and matting in the same way as *larp* (*Aristida depressa*) or *āwaj* (*Stachyarrum ciliare*), another hard grass. *Khar* (*Andropogon muricatus*), the roots of which are used for making *tattis*, fans and scent, and *dābh* or *dob* (*Cynodon dactylon*), a very fine grass which will keep for years, are of rare occurrence.

The desert grasses consist of *dhāman*, which has already been mentioned and is considered the best; *blurūt* (*Cenchrus catharticus*), particularly abundant in years of scarcity when the poorer people subsist on it; the seed of this grass is about the size of a pin's head and is enclosed in a prickly husk which causes a great deal of discomfort to both man and beast, as it sticks in the clothes of the former and the hair of the latter, and is very difficult to remove. Other grasses found in the western half of the State are *muraat* (*Chloris Barburghiana*); *maksi* (*Eleusine Egyptiaca*); *mothea* (*Mothea tuberosa*); *tāntū* (*Eleusine flagellifera*); *siwan* (*Panicum frumentaceum*); and *bikaria*, which is the poorest of them all.

On the higher slopes of the *Arāvallis* are some trees and plants which could not exist in the dry hot plains, such as an orchid, am-

bārtari (*Aerides affine*); a stinging nettle, *agia* (*Girardinia heterophylla*); the *charr* (*Pongamia glabra*); a wild rose; the *karanda* (*Carissa carandas*), etc., besides a few ferns and mosses.

The fauna is rather varied. Lions are now extinct, the last four having been shot near Jaswantpura about 1872, and the wild ass (*Equus onager*) is seldom, if ever, seen; but tigers, black bears and *sāmbār* (*Cervus unicolor*) are still to be found in the Arāvallis and the Jaswantpura and Jālor hills, though in yearly decreasing numbers. Wild pig are fairly numerous in the same localities, but are scarcer than they used to be in the low hills adjacent to the capital. Wolves are common in the west, where they hunt in packs and are much dreaded by the people, and wild dogs are occasionally met with in the forests. Panthers and hyænas are generally plentiful in the neighbourhood of hills and ravines, while *nīlgai* (*Boselaphus tragocamelus*) are found in several of the northern and eastern districts. Ravine deer abound in the plains, as also do black buck, save in the actual desert, but the *chītāl* (*Cervus axis*) is only seen on the slopes of the Arāvallis in the south-east. In addition to the usual small game, such as hare and several varieties of partridge and quail, jungle-fowl and spur-fowl are to be found on the Arāvallis and some of the higher hills, and there are four species of sandgrouse (including the imperial) and two of bustard, namely the great Indian (*Eupodotis Edwardsi*) and the *houbāra* (*Otis Macqueeni*.) Both kinds of florican (*Sypheotides aurita* and *bengalensis*) are seen in the grass-lands during the rains, but disappear immediately after. Throughout the cold weather, in seasons of ample rainfall, when the tanks and marshes become well replenished, duck and teal are found in abundance, and geese, snipe, bittern, rails, plovers, and godwits are common.

Of fish there is no great variety, but the following are obtainable from some of the rivers and tanks:—*lānchi* or fresh water shark (*Bagarius yarrelli*); *sānwal* or murrel (*Ophiocephalus marulius*); *gīri* (*Barilius modestus*); *derai* (*B. barila*); *rohū* (*Labeo rohita*); *chilwā*; and *natāra*, a species of mullet (*Mugil corsula*).

The climate is dry, even in the monsoon period, and characterised by extreme variations of temperature during the cold season (15th November to about 15th March), when the mean daily range is sometimes as much as 30° and malarial and other fevers prevail. The hot months are fairly healthy, but the heat is intense and trying; scorching winds prevail with great violence in April, May and June, and sand-storms are of frequent occurrence. The climate is often pleasant towards the end of July and in August and September, but a second hot weather is not uncommon in October and the first half of November.

An observatory was opened at Jodhpur city on the 10th October 1896, and the average daily mean temperature for the nine years ending 1905 has been 80·9° (varying from 62·7° in January to 94·2° in May). The mean daily range is about 25° (16·6° in August and 30·5° in November); the mean maximum 93·4° (76° in January and

107.3° in May); and the mean minimum 68.3° (49.4° in January and 82.2° in June). The highest temperature recorded since the observatory was established has been 120.9° on the 10th June 1897, and the lowest 27.9° on the 29th January 1905.

Observatories are maintained by the Government of India at Pachbhadra and Sāmbhar, and statistics are available for twenty-seven and twenty-six years respectively. The average daily mean temperature at the former place is 80° and the mean daily range 29.9°; the similar figures for Sāmbhar are 76.9° and 24.8°. The highest and lowest temperatures recorded at these observatories during recent years have been:—Pachbhadra, 123.6° on the 25th May 1886 and 24.2° on the 31st January 1905; Sāmbhar, 117° in 1897 (date not known) and 25° on the 31st January and 1st February 1905. Some further details regarding temperature will be found in Tables Nos. XIV and XV in Volume III-B.

The country is situated outside the regular course of both the south-west and north-east monsoons, and the rainfall is consequently scanty and irregular. Moreover, even in ordinary years, it varies considerably in different districts and is so erratic and fitful that it has become a common saying among the village folk that "sometimes it rains on one horn of the cow lies within the rainy zone and the other without." The rains in their advent into Mārwar first come into contact with the hilly districts in the south-east and south, where the woods attract and absorb a large share of the moisture, but as they advance towards the west and north, they often lose themselves in the dry and hot air of the desert. The State receives but a very small share of the winter rains of northern India, and as substitutes for summer showers has only dry the air to offer. There is thus practically one rainy season, and it is of very short duration; if the fall is deficient in amount or badly distributed, there is no hope of a change for better times until the next year's rains come round.

The average annual fall at Jodhpur city during the twenty-six years ending 1905 has been 12½ inches, of which 4.43 inches are usually received in August, 3.78 in July, 1.90 in September, and 1.30 in the closing days of June. The actual fall has varied from 29½ inches in 1893 to less than one inch in 1899, and it may be of interest to mention that in August 1881 ten inches fell in a single day. Statistics for the districts are available for periods ranging from eight to twenty-five years and show the average annual rainfall to be less than seven inches at Sānkra and Sheo in the west, more than eighteen at Bāli in the south-east and Jaswantpura in the south, and nearly twenty at Sāmbhar in the north-east. As in the case of the capital, 1893 was the year of heaviest rainfall, more than 55½ inches having been received at Sānchor in the south, while in 1899 only fourteen cents were registered at Sheo and Sānkra. Some further particulars regarding the rainfall will be found in Tables Nos. XVI and XVII in Volume III-B.

from the Parihār Rājputs of Mandor and, being greatly harassed by Mers, Bhils and Minās, invoked the aid of Siāhji in dispersing them. This he readily accomplished and, when subsequently invited to settle in the place as its protector, celebrated the next Holi festival by putting to death the leading men and in this way adding the district to his conquests. The foundation of the State now called Jodhpur thus dates from about 1212, but this was not the first appearance of the Rāthors in Mārwar for, as the inscription at Bijāpur in the south-east tells us, five of this clan ruled at Hathūndi (Hastikūndi) in the tenth century, and they are supposed to have been an offshoot of the Rūshtrakūtas of the Deccan. In Siāhji's time, however, the greater part of the country was held by Parihār, Gohel, Chauhān, or Paramāra (Ponwār) Rājputs.

A list of the chiefs of Mārwar from 1212 to the present time will be found in Table No. XVIII in Volume III-B. Siāhji, having murdered the leading Brāhmins of Pāli, outlived his treachery for only twelve months and left three sons. The eldest, Asthān, succeeded him, conquered Idar from the Bhils and gave it to his brother Soni while his other brother, Ajai Mal, is said to have defeated a Chondā chief named Bikam Singh and established himself in some of the parts of Saurāshtra (Kāthiāwār). Of the next eight chiefs there is little to be said save that they unsuccessfully attempted to wrest Mandor from the Parihār Rājputs, but Salkha is deserving of mention as the other of Mallināth after whom the district of Mallāni takes its name.

In 1381 Rao Chonda accomplished what his predecessors had been unable to do; he took Mandor from the Parihār chief and made his possession secure by marrying the latter's daughter. This place was the Rāthor capital for about eighty years, and formed a convenient base for adventures further afield which resulted in the annexation of Nāgaur and other places before Chonda's death in 1408 or 1409. He had fourteen sons, the eldest of whom was Ran Mal, and one of his daughters was married to Rānū Lākhā of Mewār and was the mother of Rānā Mokal.

According to some authorities, Ran Mal succeeded his father but others assert that a younger brother, Kanha, forcibly seized the gaddi and held it for five years when he was killed fighting against the Sūnkā Rājputs, and that he was followed by his son Satta who, after ruling for four years, made way for his uncle Ran Mal. To the latter is attributed the introduction of uniform weights and measures in Mārwar, and in his time the district of Nāgaur was lost. He is described as a great athlete and in stature almost gigantic, but he appears to have spent most of his time at Chitor where he interfered in Mewār politics and was eventually assassinated while attempting to usurp the throne of the infant Rānū Kūmbha. He left twenty-four sons whose issue form the great vassalage of Mārwar.

The next chief was Jodha, the eldest son of Ran Mal, who was born in 1415, succeeded in 1444 and died in 1488. He was a man of great vigour and capacity, and a very successful ruler who fully recognised the worth of his allodial proprietors, whom he commemo-

Founda
Jodhpur
city, 1459.

rated in the hall of heroes at Mandor. After annexing the district of Sojat in 1455, he laid the foundation of Jodhpur city in 1459 and transferred there the seat of government. His daughter, Sāranga Devī, was married to Rānā Rai Mal of Mewār, and of his numerous sons—he is said to have had fourteen or seventeen—the eldest, Sātāl, succeeded him; the sixth was Bika, the founder of the Bikaner State; and the fourth was Dūda who established himself at Mertā (whence the Mertia sept of the Rāthors takes its name), gave his daughter Mirān Bai in marriage to Rānā Kūmbha, and was himself the grandfather of the heroic Jai Mal* who defended Chitor against Akbar in 1567 and whose descendants are the Thākurs of Badnor in the Udai-pur State.

Rao Sātāl ruled for only three years (1488—91); he built the fort of Sātālmer near Pokaran in the north-west and was killed in a battle with the *Sūbahdār* of Ajmer. His successor was his brother Jūja or Sūraj Mal, remembered as the cavalier prince who in 1516 met his death in a fight with the Pathāns at the Pipār fair, while rescuing 140 Rāthor maidens who were being carried off. He was followed by his grandson Ganga, whose uncle (Sanga) contested his inheritance and called in the aid of Daulat Khān Lodī. Then followed a civil strife which was terminated by the ignominious defeat of the Rāthor in an engagement in which Sanga was slain. About ten years since the Rāthors were called on to unite their forces with those of the Mewār to oppose the invasion of Bābar. The famous Rānā Sangrām Singh led the Rājputs, and Rao Ganga “deemed it no degradation to acknowledge his supremacy and send his quotas to fight under his standard,” but this the last confederation made by the Rājputs for national independence was defeated on the fatal field of Khānua † (12th March 1527), and Rai Mal, the grandson of Ganga, with the Mertia chieftains, Khet Singh and Ratna, and many other Rāthors of note were slain. Ganga died about five years after this event and was succeeded by his son Māldeo, the most valiant and energetic Rājput of his time.

Rao Māldeo,
1532—62
(or 1569).

The position of Mārwar at this period was eminently excellent for the increase and consolidation of its resources. The emperor Bābar found nothing in its sterile lands to tempt him from the rich plains of the Ganges, where, moreover, he had abundant occupation; and the districts and strongholds on his south-western frontier, still held by the officers of the preceding dynasty, were rapidly acquired by Māldeo who became, in the words of Firishta, “the most powerful prince in Hindustān.” Mirza Hādi in his preface to Jahāngir’s Memoirs has the following remark:—“Rājā Māldeo was so powerful that he kept up an army of 80,000 horse. Although Rānā Sanka (Sangrām Singh), who fought with *Firdaus—makānī* (Bābar), possessed much power, Māldeo was superior to him in the number of soldiers and the extent of territory; hence he was always victorious.”

* See Vol. II-A of this series, pages 19—20 and 90.

† See Vol. II-A, page 18.

him, he turned round and attacked them. Many of the royal soldiers fell, and nearly two hundred Rājputs were slain. Devī Dās himself was unhorsed and, being overtaken as he lay upon the ground, was cut to pieces.* The fort of Merta was then occupied by the imperial forces (in 1562)".

According to some authorities, Rao Māldeo died in 1562, while others say that he lived till 1568 or 1569 and, to appease Akbar, who was then at Ajmer, sent his son, Chandra Sen, to him with gifts, but the emperor was so dissatisfied with the disdainful bearing of the desert chief who refused personally to attend his court that he besieged Jodhpur, forced the Rao to pay homage in the person of his eldest son, Udai Singh, and, assuming a superiority to which he was not entitled, presented to the Bikaner chief, Rai Singh, a scion of the Jodhpur house, the formal grant for Jodhpur itself together with the leadership of the clan.

Rao Māldeo died shortly afterwards, and then commenced a civil strife between his two sons, Udai Singh and Chandra Sen, ending in favour of the latter who, though the younger, was the choice both of his father and the nobles. Very little is known of Chandra Sen except that he was no friend of Akbar and was on more than one occasion besieged by imperial troops in his stronghold of Siwāna. His death occurred about 1581 or 1583, and he was succeeded by his elder brother, Udai Singh.

The period now reached forms an important epoch in the annals of this State inasmuch as its ruler for the first time acknowledged the supremacy of the Mughal empire. By giving his sister Jodh Bai in marriage to Akbar and his daughter Mān Bai to the prince Salīm (Jahāngīr), Udai Singh recovered all the former possessions of his house, with the exception of Ajmer, and obtained several rich districts in Mālwa and the title of Rājā. Abul Fazl mentions him as the commander of 1,000, but the *Tabakāt-i-Akbarī* says that he was in 1593 a commander of 1,500; and he is universally known as the *Motā Rājā* (literally, "the fat-prince", but possibly signifying the "great" or "good" or "potent" prince). His Rāthors performed many signal services for the emperor, and he himself accompanied Sādik Khān on the expedition against the chief of Orchhā in Bundelkhānd (in 1577) and served in Gujarāt with Muzaffar Khān in 1583, but latterly was "too unwieldy for any steed to bear him to battle". Within his own territory, Udai Singh ruled with a strong hand, chastising the nobles who had sided with his brother, Chandra Sen, against him, and confiscating many villages of the Chārāns. He had a numerous progeny—thirty-four legitimate sons and daughters—and died in or about 1595, being succeeded by his eldest (or, as some say, his sixth) son, Sūr Singh. Among his other sons may be mentioned Kishan Singh, the first chief of the Kishangarh State, and Kesu or

* The quotation is from the *Tabakāt-i-Akbarī*, but some say that he was wounded and escaped.

† Blochmann thought that Jodh Bai was the daughter of Udai Singh and the wife of Jahāngīr. (*Ain-i-Akbarī*, Vol. I, page 619, Calcutta, 1873.)

Kesri Singh who was the founder of the Pisāngan *istimrāri* estate in the Ajmer District, while one of his great-grandsons, Ratan Singh, founded Ratlām in the Central India Agency.

Sūr Singh was serving with the emperor's army at Lahore, where he had commanded since 1592, when intelligence reached him of his father's death. His military talents and brilliant services had obtained for him, even during his father's life, the title of Sawai Rājā, and he is said to have held a *mansab* of 4,000, subsequently raised to 5,000, though this is doubtful as his name does not appear in the list of *mansabdārs* given by Abul Fazl. By command of Akbar, he reduced Rao Sūrthān, the chief of Sirohi, and for services rendered in Gujarāt and the Deccan under the princes Murād and Dāniyāl, he received five fiefs in the former, and one in the latter province. Rājā Sūr-Singh died in the Deccan in 1620; he added greatly to the lustre of the Rāthor name, was esteemed at court and, as the bard expresses it, "his spear was frightful to the southron," but he greatly lamented the necessity of having to serve the emperor in parts distant from his native land and is said to have caused a column to be erected on which were engraven words cursing any of his race who should ever in the future even once cross the Narbadā.

Rājā Sūr
Singh, 1595-
1620.

The next chief was Gaj Singh, the eldest son of Rājā Sūr Singh, who had already earned the favour of the emperor by his gallantry at the escalade of Jālor and by fighting against Rānā Amar Singh of Mewār. Like his father, he is said to have been a *mansabdār* first of 4,000 and subsequently of 5,000, but he served with even greater distinction, and was nominated viceroy of the Deccan, besides receiving several districts in *jāgīr*. In at least eight sieges and battles his Rāthors had their full share of glory and earned for their leader the titles of *Dalhamna* (barrier of the host) and *Dalbhanjan* (destroyer of the army), and, as a special mark of favour, the horses of his contingent of cavalry were exempted from being branded with the imperial mark. Rājā Gaj Singh died in 1638 either at Agra or while suppressing an insurrection in Gujarāt, and left a distinguished name in the annals of his country and two valiant sons to maintain it.

Rājā Gaj
Singh, 1620-
33.

The elder of these sons, Amar Singh, had been disinherited in 1634 in consequence of his violent disposition and turbulent conduct, and the younger, Jaswant Singh, consequently succeeded to the *gaddi*. He was the first ruler of Mārwār to hold the title of Mahārājā, and his career was the most remarkable in the history of this State. More than once the destinies of India lay in his hands, and the fate of Dārū and the fortunes of Aurangzeb were alike at his disposal. The traveller Bernier describes him as "one of Alamgīr's best generals, holding the rank of commander of 7,000."

Mahārājā
Jaswant
Singh I,
1633-78.

During the first twenty years of his rule he was engaged mostly in Gondwāna and the Deccan under Aurangzeb and greatly distinguished himself. When Shāh Juhān fell ill towards the end of 1657 and Dārū was invested with the powers of Regent, Jaswant Singh was appointed viceroy of Mālwā and received the command of the army despatched against Aurangzeb and Murād, who were then in rebellion

against their father. He marched towards the Narbadā and encamped at a place fifteen miles south of Ujjain, since named Fatebābād. Aurangzeb was the first to appear and could easily* have been crushed as his army was much fatigued by a long march and the excessive heat of the weather, but Jaswant Singh, anxious to triumph over two princes in one day, purposely delayed his attack until Murād had also come up, and in the end suffered a severe defeat. The battle was fought on the 20th April 1658 and has been described by several writers, but, as Bernier was himself present, his account must be considered the most authentic, and it is as follows: "His army having rested two or three days, Aurangzeb made the necessary dispositions for forcing the passage. Placing his artillery in a commanding position, he ordered the troops to move forward under cover of its fire. His progress was opposed by the cannon of the enemy, and the combat was at first maintained with great obstinacy. Jaswant Singh displayed extraordinary valour, disputing every inch of ground with skill and pertinacity. With regard to Kāsim Khān,† although it cannot be denied that he deserved the celebrity he had hitherto enjoyed, yet upon the present occasion he proved himself neither a dexterous general nor a courageous soldier; he was even suspected of treachery, and of having concealed in the sand, during the night that preceded the battle, the greater part of his ammunition, a few volleys having left the army without powder or ball. However this may be, the action was well supported, and the passage vigorously opposed. The impetuosity of Murād at length overcame every impediment; he reached the opposite bank with his corps, and was quickly followed by the remainder of the army. It was then that Kāsim Khān ingloriously fled from the field, leaving Jaswant Singh exposed to the most imminent peril. That undaunted Rājā was beset on all sides by an overwhelming force, and saved only by the affecting devotion of his Rājputs, the greater part of whom died at his feet. Fewer than six hundred of these brave men, whose number at the commencement of the action amounted to nearly eight thousand, survived the carnage of that dreadful day. With this faithful remnant the Rājā retired to his own territory, not considering it prudent to return to Agra on account of the great loss he had sustained."

Dow and other historians give a very similar account of the battle, and it is only Khāfi Khān, the author of the *Muntakhab-ul-Iubāb*, who writes in a different strain:—"Every minute the dark ranks of the infidel Rājputs were dispersed by the prowess of the followers of Islām. Dismay and great fear fell upon the heart of Jaswant, their leader, and he, far from acting like one of the renowned class of Rājās, turned his back upon the battle, and was content to bring upon

* Bernier writes: "Such was the opinion entertained by every spectator, especially by the French officers in Aurangzeb's artillery." He adds that Jaswant Singh stayed his hand in consequence of secret orders from Shah Jahan.

† Nawāb Kasim Khān, a soldier of first-rate reputation, sincerely attached to Shāh Jāhān but disliking Dārā; he assumed the command very reluctantly, and only in obedience to the emperor.

himself everlasting infamy. Kāsim Khān also, with other imperial officers and the forces of Dārā, took to flight."

A few months later, Aurangzeb deposed his father and usurped the throne, and one of his first acts was to send assurances of pardon to Jaswant Singh and summon him to join the army then being collected against Shujā. The Mahārājā obeyed the summons, but he did so only to be revenged, for when (in 1659) the troops of the rival brothers were about to join battle at the village of Khajubā in the Fatehpur District of the United Provinces, he wheeled about, cut to pieces Aurangzeb's rear-guard, plundered his camp, and marched with the spoils to Jodhpur. It was then his intention to assist Dārā against the emperor, but he allowed himself to be bribed by the latter with the viceroyalty of Gujarāt and remained neutral in the contest.

He subsequently served under prince Muazzam in the Deccan, where he opened a correspondence with the Marāthā leader, Sivaji, and planned the death of the imperial general, Shāistā Khān. Aurangzeb, becoming aware of these transactions, replaced Jaswant Singh by Mirza Rājā Jai Singh of Amber (Jaipur), who soon brought the war to a conclusion by the capture of Sivaji, but, when he learnt that the emperor had designs upon the life of his prisoner, for whose safety he had pledged himself, he connived at his escape. Thereupon Jaswant Singh was once more sent with supreme power to the Deccan* hut, as he immediately began to incite Muazzam to rebel against his father, he was recalled and appointed as viceroy of Gujarāt. On reaching Ahmadābād, he found it had been a trick to draw him from the Deccan and he continued his journey to his own country. Finally Aurangzeb, finding him too powerful a foe to be either forgiven or openly subdued, resolved to get rid of him by sending him to a distance. A rebellion had opportunely broken out at Kābul, and Jaswant Singh was ordered to quell it. Leaving his eldest son, Prithwi Singh, in charge of his ancestral domains, he set out with his wives and family, but had hardly reached Kābul when Aurangzeb summoned Prithwi Singh to court, treated him with marked affability and, as a sign of favour, gave him a robe of honour, but the robe was poisoned and Prithwi Singh expired a few hours later in great agony. When the news of his son's death reached Jaswant Singh, he broke down utterly and, his two other sons having fallen victims to the rigours of the climate, he died of a broken heart in December 1678 at Jamrūd.

The life of Jaswant Singh was one of the most extraordinary in the annals of Rājputāna. Had his abilities, which were far above mediocrity, been commensurate with his power, credit, and courage, he might, with the aid of the many powerful enemies of Aurangzeb, such as Rānā Rāj Singh of Mewār, Rājā Jai Singh of Amher, and Sivaji, have overturned the Mughal throne. In his rule of forty years, events of magnitude crowded upon each other from the period of his first contest with Aurangzeb in the battle of Fatehābād to his

* Jaswantpura, a village near Aurangābād, is still held by the Mahārājā of Jodhpur as a memorial of Jaswant Singh's exploits in the Deccan.

"conflicts with the Afghāns amidst the snows of the Caucasus." Although he had a preference among the sons of Shāh Jahān, esteeming the frank Dārā above the crafty Aurangzeb, yet he detested the whole race as inimical to the religion and independence of his own; and he only assisted any of the brothers because he hoped that their struggles for empire would end in the ruin of them all, and secure for himself freedom and independence. He neglected no opportunity which gave a chance of revenge and was throughout aware of Aurangzeb's wily nature, but against the hypocrisy and superior strength of a determined foe he could not but resort to fraud and treachery, and hence his acceptance of one viceroyalty after another.

At the time of Jaswant Singh's death, his wife was in the seventh month of her pregnancy and having been dissuaded from becoming *sati*, she proceeded to Lahore* and there gave birth to a boy, who was called Ajit Singh. As soon as she was able to travel, she set out on her return home and, on reaching Delhi, was commanded by Aurangzeb, whose vengeance had not yet been satiated, to surrender her son. The Rāthors who formed her escort were also promised a partition of Mārṡār among them in the event of their persuading her to comply, but they faithfully stood by the mother of their infant chief and, when the emperor attempted to take forcible possession of him, fought a memorable battle in the streets of Delhi in which they gained not only a victory but time to send away the child in a basket of sweetmeats. Ajit Singh was safely conveyed to the mountain fastnesses of his own country (the Chappan-kā-pahār near Siwāna) where he was kept till the day of danger had passed and he was in a position to proclaim himself.

The above account is taken from the local chronicles; another version will be found in Tod's *Rājasthān*, Vol. II, pages 59-61; a third in Elliot's *History of India*, Vol. VII, pages 297-298; and a fourth in Malleeson's *Native States of India*, pages 49-50.

Shortly afterwards, Aurangzeb invaded Mārṡār, sacked Jodhpur and all the large towns, destroyed the Hindu temples, erected mosques, and commanded the conversion of the Rāthors to Muhammadanism; but, in determining to compel the Rājputs to his faith, he was measuring the heavens, and his fanatical policy recoiled not only on himself but his whole race, for it cemented into one bond of union all who cherished either patriotism or religion, and in the wars that ensued the emperor gained little of either honour or advantage. About 1680 or 1681 prince Akbar seceded from his father and joined the Rāthors who promised to support him in a dash at the throne, but the allies were dispersed by a stratagem on the part of Aurangzeb and forced to retire to the Deccan. During the next six years, several desultory but bloody affrays took place between the combatants, and numerous forts were captured and recaptured. In 1687, Ajit Singh issued from his concealment and was acknowledged by his leading clansmen. In the following year the imperial forces were

* Tod says that Ajit was "born amidst the snows of Kābul."

driven for a time from the country, and in 1691 the *Hākīm* of Ajmer was compelled to pay his obeisance, but, three years later, Ajit Singh was again forced to take shelter in the hills, and in 1695 he married the niece of Rānā Jai Singh of Mewār. During the next five years, Aurangzeb was fully occupied in the Deccan, the Rāthors had time to breathe, and in 1701 Ajit Singh regained possession of his ancestral abode and celebrated the event by slaying a buffalo at each of its five gates. Two years later, however, some of his nobles deserted to the foe, and Azam Shāh seized the capital which became a prey to Moslem fanaticism and cupidity. Ajit Singh retired to Jālor, where a son, Abhai Singh, was born to him, and shortly afterwards recovered Merta and defeated the imperial troops at Dūnāra.

At length, in 1707, Aurangzeb, "the scourge of the Rājputs," died at Ahmadnagar in the Deccan, and Ajit Singh, smarting under twenty-eight years of personal misery and anarchy, hurried to his capital, ejected the Musalmān governor, and slaughtered or dispersed the imperial garrison. At this time a battle was raging near Agra between Aurangzeb's sons, Shāh Alam and Azam Shāh, in which the former, afterwards called Bahādur Shāh, was successful. He pretended to be friendly towards Ajit Singh, whom he enticed* out of Jodhpur for the alleged purpose of drawing up a treaty of peace and friendship, but in reality he coveted the place, and stealthily sent an army to seize it. Disgusted at this treachery, Ajit Singh left Bahādur Shāh and proceeded to Udaipur, where he became (in 1708) a party to the triple alliance with Rānā Amar Singh II of Mewār and Mahārājā Sawai Jai Singh of Amber to throw off the Muhammadan yoke. It was one of the conditions of this alliance that the chiefs of Jodhpur and Jaipur should regain the privilege of marriage with the Udaipur family, which they had forfeited by contracting matrimonial alliances with the Mughal emperors, on the understanding that the offspring of the Udaipur princesses should succeed to the State in preference to all other children.

This having been arranged, the two Mahārājās, Ajit Singh and Jai Singh, marched to Jodhpur (whence they expelled the governor placed there by Bahādur Shāh) and next *viâ* Merta and Ajmer to Sāmbhar, where they gained a complete victory in 1709, and, a year or two later, forced the emperor to make peace. Yet Ajit Singh's troubles were not over, for when the Saiyid brothers, "the Warwicks of the east," were in power, they called upon him to mark his subservience to the Delhi Court in the customary manner by sending a contingent headed by his heir to serve. This he declined to do, so his capital was invested, his eldest son (Abhai Singh) was taken to Delhi as an hostage, and he was compelled, among other things, to pay capitation-tax, tolerate the killing of kine, himself repair to the imperial court, and give his daughter (Indra Kunwar) in marriage† to Farrukh Siyar.

* The Musalmān historians say that Ajit Singh knew that submission alone could save him and his family and property, so he came and "expressed his sorrow, humility and obedience" and was "honoured with the gift of a robe, elephant, etc."

† The last instance of a Mughal sovereign marrying a Hindu princess.

To this marriage may be ascribed the rise of the British power in India, for Farrukh Siyar was at the time afflicted with a dangerous white swelling or tumour on the back, rendering necessary a surgical operation to which the faculty of the court were unequal, retarding the celebration of the nuptials between him and the Rāthor princess, and even threatening a fatal termination. A mission from the British merchants at Surat was at that time at Delhi, and, as a last resource, the surgeon attached to it, Mr. Hamilton, was called in. He cured the malady, and made the emperor happy in his bride; and, when asked to name his reward, he demanded a grant of land for a factory on the Hooghly for his employers. It was accorded, and to his disinterested patriotism the British owe the first royal grant or *firmān* conferring territorial possession and great commercial privileges. "Such an act deserved at least a column; but neither trophied urn nor monumental bust marks the spot where his remains are laid."

This compulsory marriage and the sight of the altars raised over the ashes of the Rāthor chieftains who had perished to preserve him in his infancy kindled all the wrath of Ajit Singh, but for the moment he entered into the views of the Saiyids with the true spirit of his father, and returned to Jodhpur in 1715, after obtaining the viceroyalty of Gujarāt as the heavy price of his coalition with them. In the two succeeding years he visited and settled that province, but in 1718 he was required at Delhi where the Saiyids and their opponents were engaged in civil strife. Here he formed a league with Abdullah (one of the king-makers) to oppose Mahārājā Jai Singh of Amber and the Mughals, and he received from Farrukh Siyar the *mansab* of 7,000 and the addition of a crore of *dāms* (2½ lakhs of rupees) to his rent-roll, as well as the insignia of *māhī murātib*, elephants, horses and jewels. In 1719 Farrukh Siyar was murdered, whereupon Ajit Singh, declining to sanction any further the nefarious schemes of the Saiyids, returned to Jodhpur with his daughter,* the late king's widow, and left his son, Abhai Singh, behind at Delhi. In the following year the Saiyid brothers were assassinated, and Ajit Singh had no difficulty in annexing Ajmer, the salt-lakes of Sāmbhar and Didwāna, and other places. He had now reached the supreme moment in his eventful life, for he began to coin money in his own name, introduced his own weights and measures, established courts of justice, regulated the ranks of his nobles on a new scale, and routed with heavy loss the Mughal armies that were sent to recover Ajmer, but he had to surrender that fortress to Muhammad Shāh in 1723. In the very next year was committed "the foulest crime in the annals of Rājasthān," namely the murder of Ajit Singh under the following circumstances. Abhai Singh, the heir apparent,

* According to the *Muntakhab-ul-Lubāb*, he took back his daughter "with all her jewels and treasure and valuables, amounting to a crore of rupees in value. According to report he made her throw off her Musalmān dress, dismissed her Muhammadan attendants, and sent her to her native country. In the reign of no former emperor had any Rājā been so presumptuous as to take his daughter after she had been married to a king and admitted to the honour of Islām."

who spent much of his time at Delhi, had been persuaded that the only mode of arresting the ruin of Mārwar and hastening his own elevation was the murder of his father, and he accordingly wrote to his brother, Bakht Singh, suggesting that he should carry this out and promising him Nāgaur and its 555 villages as a reward. Not only was Bakht Singh unstartled by the proposition, but he executed the deed with his own hands. Eighty-four *satīs* are said to have taken place on this dire occasion, the mother of these unnatural sons leading the procession, and so much was Ajit beloved that even men devoted themselves on his pyre.

Thus closed the career of one of the most distinguished chiefs who ever occupied the *gaddi* of Jodhpur. He was possessed of great vigour of mind as well as of body; valour was his inheritance, but his talent for intrigue was not commensurate with his boldness, though he played the role of king-maker with great effect. The one stain on his fair name was the banishing of the heroic Durgā Dās, the preserver of his infancy, the instructor of his youth, and the guide of his manhood, who, by repeated instances of exalted self-denial, had refused wealth and honours that might have raised him from his vassal condition to an equality with his chief.

Mahārājā
Abhai Singh,
1724-50.

Abhai Singh succeeded his father as ruler of Mārwar, and was invested by Muhammad Shāh who included Nāgaur in his *sanad*. That district was held by Indra Singh, another Rāthor, but Abhai Singh at once took it from him and subsequently made it over to his brother, Bakht Singh, the parricide. In 1730 he was appointed viceroy of Gujarāt and Ajmer, and placed at the head of an army with orders to suppress the rebellion of Sarbuland Khān in the former of these provinces. Leaving Delhi in June of the same year, he proceeded first to Ajmer, where he installed his officers, and next to Jodhpur, where he halted while his troops gradually assembled. Thence he marched *viâ* Siwāna, Jālor, Sirohi, Pālanpur and Sidhpur, and eventually (in 1731) reached Ahmadābād which he carried by storm after besieging it for three days. Sarbuland Khān was wounded and surrendered with all his effects, and Abhai Singh, having left a garrison of 17,000 men for the duties of the capital and province, returned to Jodhpur with the spoils of victory (said to have been four crores of rupees and 1,400 guns of all calibres, besides military stores), and with these, in the declining state of the empire, he strengthened his forts and garrisons, and determined, in the general scramble for dominion, not to neglect his own interests.

The only other events of this period that are deserving of mention are a desultory siege of Bikaner and a war between Jodhpur and Jaipur, brought about by Bakht Singh, whose appanage of Nāgaur was too restricted a field for his talents and ambition. Bakht Singh, however, finding that matters had gone further than he intended, rejoined Abhai Singh and offered to bear the entire brunt of the battle—a proposal to which Abhai Singh, whose love of ease and opium increased with his years, and who was in no way averse to see his brother punished, assented. In the engagement that ensued

Gangwāna in the Ajmer District, Bakht Singh led the Rāthors who charged through and through the lines of the Kachiwālas and forced Mahārājā Jai Singh to retire. The latter, however, gained his point, namely the raising of the siege of Bikaner, and the Rānā of Udaipur mediated to prevent the quarrel going further.

Abhai Singh died in 1750; his courage, which may be termed ferocious, was tempered only by his excessive indolence, regarding which there are many amusing anecdotes. He was famous for his strength, and his ambition was to be considered the first swordsman in Rājwāra. At his time (1739) Nādir Shāh invaded India, but the summons to the Rājput chiefs to put forth their strength in support of the tottering throne of Timūr was received with indifference.

Abhai Singh was succeeded by his son, Rām Singh, a youth of an impetuous and overbearing disposition, who ruled for only two years. Throughout this period, there was constant fighting between him and his uncle, Bakht Singh, and eventually he was utterly defeated in a sanguinary battle near Merta in 1752, and forced to flee to Ujjain, where he found Jai Appa Sindhia and with him concerted measures for the invasion of his country.

Bakht Singh then became Mahārājā of Jodhpur, but in the following year (1753) met his death by means, it is said, of a poisoned robe given him by his aunt or niece, the wife of the Jaipur chief; he left a disputed succession and all the horrors of impending civil strife to his son, Bijai Singh. Of Bakht Singh, Tod writes thus:—"There was a joyousness of soul about Bakhta which, united to an intrepidity and a liberality alike unbounded, made him the very model of a Rājput. To these qualifications were superadded a majestic mien and herculean frame, with a mind versed in all the literature of his country, besides poetical talent of no mean order; and, but for that one damning crime, he would have been handed down to posterity as one of the noblest princes Rājwāra ever knew. He completed the fortifications of the capital, and greatly added to the palace of Jodha from the spoils of Ahmadābād. Had he been spared a few years to direct the storm then accumulating, which transferred power from the haughty Tātar of Delhi to the peasant soldier of the Kistna, the probability was eminently in favour of the Rājputs resuming their ancient rights throughout India."

On Bakht Singh's death, his son, Bijai Singh, was installed as Mahārājā at Mārot, but hardly had he received the homage of his people when he was called upon to meet his cousin Rām Singh who was advancing with an army to claim his birthright, assisted by the Marāthās. The battle which ensued on the plains of Merta (about 1756) was of the most desperate description, and two accidents occurred, each of which was sufficient to turn victory from the standard of Bijai Singh. In the first place, the Jodhpur troops mistook a body of their own cavalry, just returning from a successful charge, for the enemy and proceeded to mow it down with discharges of grape-shot; and subsequently they were taken in by a ruse on the part of Sardār Singh of Kishangarh, himself a Rāthor who had joined Rām Singh's

side. As a last resort, Sardār Singh despatched a horseman to the division which pressed them most with a message to the effect that there was nothing for them to fight for, as their chief, Bijai Singh, was lying dead in another part of the field. Not a man enquired into the truth of the report; the Jodhpur army, with victory in its grasp, retired panic-stricken, and Bijai Singh escaped with difficulty to Nāgaūr.

With the loss of this battle, the strongholds rapidly fell and the cause of Rām Singh was triumphing. Bijai Singh held out gallantly in Nāgaūr, but of other important towns, only the capital and Jālor, Siwām and Phaloli had not been reduced; and in this extremity he listened to an offer to relieve him from the lacerations of the Marāṭhās. A Rājput and an Afghān, both foot-soldiers on a small monthly pay, volunteered, if their families were provided for, to sacrifice themselves for his safety by assassinating Jai Appa. Assuming the garb of camp-followers, they proceeded to the tent of the Marāṭhā, feigning a violent quarrel, and, as he listened to their story, they stabbed him simultaneously. The alarm was immediately given, and the Afghān was slain, but the Rājput, mingling with the throng, escaped by a drain into Nāgaūr*. The siege continued for a time, but eventually a compromise was made by which the Marāṭhās abandoned the cause of Rām Singh and received from the Rāthors the fort and district of Ajmer as blood-money, and the promise of a fixed triennial tribute.

Rām Singh, deserted by his allies, continued for a time to assert his rights, but at length accepted the Jodhpur share of the Sambhar lake, and, Jaipur relinquishing the other portion, he resided there until his death in 1773. The adversity of his later days had softened the asperity of his temper and caused his early faults to be forgotten, though too late for his benefit. His person was described as gigantic, his demeanour affable and courteous, and he was generous to a fault. His understanding was excellent and well-cultivated, but his capricious temperament, to which he gave vent with an unbridled vehemence, disgusted the high-minded nobles of Mārwar, and involved him in exile and misery to his death. But in spite of his errors, the fearless courage he displayed against all odds kept some of the most valiant of the clans constant to his fortunes, especially the brave Mertius under the heroic Sher Singh of Rinn, whose deeds can never be obliterated from the recollection of the Rāthors.

The death of Rām Singh was, however, no panacea to the troubles of Mārwar or of its chief. The Marāṭhās from their *point d'appui* in Ajmer continued to foster disputes which tended to their advantage and, when opportunity offered, scoured the country in search of pay or plunder. Bijai Singh was left resourceless, his ruinous wars and still more ruinous negotiations having exhausted the hoards of wealth accumulated by his predecessors; the crown lands were uncultivated,

* Grant Duff says that the two men who killed Jai Appa visited him as "accredited negotiators." A different account will be found in Elliot's *History of India* Vol. VIII, pages 200-10.

the tenantry dispersed, and the nobles, proud of the strength they had displayed in rescuing the *gaddi* of Ajit Singh from the despotism of the empire, and demoralised by alternate favour or disgrace as they had adhered to or opposed the successful claimant for power, were entirely out of humd. To escape from their tutelage, Bijai Singh raised a standing mercenary force in Sind to serve as guards for the capital, and with its help he treacherously murdered some of his leading chieftains, such as the Thākurs of Awā and Pokaran.

For a time the feudal interest was restrained, anarchy was allayed, commerce flourished, general prosperity revived, and, in the words of the chronicle, "the tiger and the lamb drank from the same fountain." Bijai Singh took the best means to secure the fidelity of his nobles by finding them occupation; he led them against the robbers of the desert and conquered Umarmot,* curtailed the territories of Jaisalmer, and added the rich province of Godwār from the Rānā of Mewār. The tract last mentioned had been wrested from the Parihār chief of Mandor by the Sesodias before Jodhpur city was built, and had been made over temporarily to Jodhpur by Rānā Ari Singh II (1761-73), in order to preserve it from the pretender, Ratna. Bijai Singh declined to give it up and, as the Rānā was not strong enough to recover it, it passed into the permanent possession of the Rāthors.

The country had enjoyed several years of peace when the rapid strides made by the Marāthās towards universal rapine, if not conquest, compelled the Rājputs once more to form a union for the defence of their political existence. The rival armies met at Tonga near Jālsot in Jaipur territory in 1787, and the Mughal generals, Muhammad Beg and Ismāil Beg, added their forces to those of the allied Rājputs. In the battle that ensued the Rāthors had their full share of glory, the Thākur of Rian particularly distinguishing himself, and Sindhia was routed and compelled to abandon not only the field but all his conquests for a time. By this victory Bijai Singh recovered Ajmer, and declared his tributary alliance with the Marāthās to be null and void. Sindhia soon returned, however, and in 1790† defeated the Rājputs in the murderous engagements at Pātan (in the Jaipur State) on the 20th June and at Merta on the 10th or 12th September†, imposed on Jodhpur a fine of sixty lakhs of rupees, and recovered Ajmer which was thus lost for ever to the Rāthors.

Grant Duff in his account of the battle of Pātan hardly mentions the Rājputs, but says that "Ismāil Beg fought with his usual bravery,

* A *tāluk* and town now in the Thar and Parkar District of Sind. It was acquired by the Rāthors in 1780, but was wrested from them in 1813 by the Talpur Amirs. After the conquest of Sind (1843), the Government of India promised to restore the tract to the Mahārājā but, as the fort was a valuable frontier post and the district could not be controlled by Jodhpur, it was deemed best for Government to retain possession and give the Marwār Darbār Rs. 10,000 a year.

† In Vol. I of his *Rājasthān*, Tod gives the date of the battle of Merta as 10th September 1790, but in Vol. II says that both battles were fought in 1791. Grant Duff gives 1790 for Pātan, and 12th September 1791 for Merta, while Keene, on the authority of de Boigne, writes 10th September 1790. A tomb erected to the memory of a French captain of infantry at Merta has an inscription to the effect that he was wounded in Sindhia's service on the 11th September 1790, and died a week later.

and a body of his Pathāns thrice charged through the regular infantry of the Marāthās," and that de Boigne displayed great personal energy, and "to his gallantry and the discipline of his battalions was justly attributed the great victory which ensued." The army of Ismāil Beg was completely routed, all his guns were taken, and ten battalions of infantry grounded their arms and surrendered. The Mārṡār chronicles, on the other hand, ascribe the defeat to the traitorous conduct of the Jaipur troops who, "on condition of keeping aloof during the fight, were to have their country secured from devastation. As usual, the Rāthors charged up to the muzzles of de Boigne's cannons, sweeping all before them, but, receiving no support, they were torn piecemeal by showers of grape and compelled to abandon the field."

The battle of Merta is thus described by Keene in his *Fall of the Mughal Empire*:—"De Boigne came up in the grey of the morning when the indolent Hindus were completely off their guard; and, when the Rājā and his companions were roused, they found the camp deserted and the army in confusion. Fifty field-pieces were piercing the lines with an incessant discharge of grape-shot, and Colonel Rohan who commanded de Boigne's right wing had, with unauthorised audacity, thrown himself into the midst of the camp at the head of three battalions. Rallying a strong body of horse—and the Rājput cavaliers were brave to a fault—the Rājā fell furiously upon the advanced corps of infantry, which he hoped to annihilate before they could be supported from the main army. But European discipline was too much for Eastern chivalry; it was the squares of Waterloo before the *gendarmes* of Agincourt. The ground shook beneath the impetuous advance of the dust-cloud, sparkling with flashes of quivering steel; but when the cloud cleared off, there were still the hollow squares of infantry, like living bastions, dealing out lightnings far more terrible than any that they had encountered. The baffled horsemen wheeled furiously round on the Marāthā cavalry, and scattered them to the four corners of the field; they then attempted to gallop back, but it was through a valley of death. The whole of the regular troops of the enemy lined the way; the guns of de Boigne, rapidly served, pelted them with grape at point-blank distances; the squares maintained their incessant volleys and by nine in the morning nearly every man of the 4,000 who had charged with their prince lay dead upon the ground. Unfatigued and almost uninjured, the well-trained infantry of de Boigne now became assailants; the battalions rapidly deployed and, advancing with the support of their own artillery, made a general attack upon the Rājput line. By three in the afternoon all attempt at resistance had ceased, and the whole camp, with vast plunder and munitions of war, fell into the hands of the victors. The Rājput army is stated in the memoir of de Boigne to have mustered no less than thirty thousand horse, twenty thousand foot, and twenty-five guns." We learn from General de Boigne's own description of the battle, that his battalions were only enabled to resist the furious charge of the Rāthor* horse by

* Grant Duff mentions this gallant band and gives its strength as only 400. Tod, however, says 4,000.

relatives as might be considered rivals; he put out the eyes of one uncle, Sher Singh, killed another, Sardār Singh, and arranged for the death of his cousin, Sūr Singh. There remained but one claimant, his young cousin Mān Singh, and he was safe within the strong walls of Jālor where, for nearly ten years, he repelled repeated assaults. In 1803, however, the lower portion of the town was taken, and the fall of the fortress and the capture of Mān Singh seemed imminent, when news suddenly arrived of Bhīm Singh's death.

Mān Singh was immediately proclaimed chief of Jodhpur, and at the commencement of the Marāṭhā war was offered by the British Government an alliance which would have secured to him his territories without the payment of any tribute. The terms had actually been drawn up by December 1803, but, instead of ratifying the treaty, Mān Singh proposed another and, as he had in the meantime given assistance to Holkar, the alliance was formally cancelled in May 1804, and the Mahārājā was left to his own resources. Troubles then came quickly upon Jodhpur owing to internal disputes regarding the succession of Dhonkal Singh, a supposed posthumous son of Bhīm Singh, and a disastrous war with Jaipur for the hand of the daughter of the Māhārājā of Udaipur, by name Krishna Kunwari, "the Helen of Rājasthān." In this war the Jaipur Chief, Jagat Singh, called in the aid of the freebooter, Amīr Khān, and Mān Singh was besieged in his capital. The town, little capable of defence, was soon taken and given up to unlicensed plunder, but the fort held out and, although the defences of the north-eastern angle were destroyed, the besiegers were no nearer their object and became

* In the British District of Merwāra.

clamorous for pay. The protracted defence had exhausted the Jaipur treasury, and Mān Singh seized the opportunity of bribing Amīr Khān to come over to his side and attack and plunder Jaipur. This had the desired effect; Jagat Singh raised the siege in 1806 and, sending on in advance the spoils (including forty pieces of cannon) with his chieftains, offered the Marāthā leaders twelve lakhs of rupees to escort him safely to his capital, and secretly bribed Amīr Khān, the author of his disgrace, with a bond for nine lakhs more not to intercept his retreat. The Jaipur chieftains, conveying back the spoils of Jodhpur, were attacked on the joint frontier by the Thākurs of Kuchāwan, Ahor, Jālor and Nimāj, who determined that no trophy of Rāthor degradation should be carried away by the Kachwāhas, and were defeated and dispersed, the entire booty, including the forty guns, being safely lodged at Kuchāwan.

Amīr Khān then returned to Jodhpur where he was received with distinguished honours, given an advance of three lakhs, and promised a large reward if he completely subdued the rebellious nobles who were still supporting the pretender, Dhonkal Singh. This he swore to accomplish, and he kept his word by treacherously massacring forty-two of them at Nāgaur in 1808, and sending the heads of the most distinguished of them to Mān Singh. In this way, the latter established himself, though the dissensions between him and his principal clansmen continued until his death. About this time, an expedition was planned against Bikaner, the chief of which State had sided with Dhonkal Singh; an encounter took place at Bāpri in which the Bikaner army lost two hundred men and then fell back on the capital, pursued by the victors who halted at Gajner. Here terms were arranged, namely the payment by Bikaner of two lakhs and the surrender of the bone of contention, the town of Phalodi, which had been assigned to it as the price of joining the confederacy.

Amīr Khān was now the arbiter of Mārwar; he plundered Nāgaur and left a garrison there; he then repaired to Jodhpur where he received ten lakhs, two large towns, and Rs. 100 daily as table-money; and he subsequently partitioned the district of Merta among his followers, and placed troops at Nāwa, thus commanding the Sāmbhar lake. In 1814 he renewed his raids and, at the request of some of the chieftains, murdered Mān Singh's *Diwān*, Indrāj, and his spiritual director, Deonāth, the latter of whom, while holding the keys of his master's conscience, had also been conveniently using them to unlock the treasury. This outrage so terrified the Mahārājā that he pretended insanity and, after abandoning all power to the Nāths (of which sect Deonāth had been the head), became a recluse. Amīr Khān remained in the country till 1817 when he withdrew after plundering the treasury, and Chhatar Singh, the only son of Mān Singh, assumed the regency.

With him the British Government opened negotiations at the outbreak of the Pindāri war, and a treaty was concluded in January 1818, by which the State was taken under protection and agreed to

pay an annual tribute of Rs. 1,08,000* and to furnish, when required, a contingent of 1,500 horse and the whole of its forces, except such portion as might be required for the internal administration of the country. Chhatar Singh died from the effects of dissipation shortly after the conclusion of the treaty, whereupon his father threw off the mask of insanity and resumed the government.

Strengthened in his position by British protection, Mān Singh, in the course of the next two years, put to death or imprisoned most of the nobles who, during his assumed imbecility, had shown any unfriendly feeling towards him, and many of the others fled from his tyranny and appealed for aid to the British Government, with the result that in 1824 the Māhārājā was obliged to restore the confiscated estates of some of them. In 1827 some of the nobles again rebelled and, putting the pretender, Dhonkal Singh, at their head, collected a considerable body of men in Jaipur territory and prepared to invade Jodhpur. Upon this, Mān Singh urged on the British Government that the time had arrived when he was entitled to the aid of their troops to support him on the *gaddi*, and that the attack by which he was threatened was not an internal insurrection but a foreign invasion emanating from and supported by Jaipur. The answer of Government was clear and decided. "If insurrection should be so general as to indicate the desire of chiefs and subjects for the downfall of the prince, there does not exist any reason for our forcing on the State of Jodhpur a sovereign whose conduct has totally deprived him of the support and allegiance of his people. Against unjust usurpation, or against wanton but too powerful rebellion, the princes of protected States may fairly perhaps call on us for assistance but not against universal disaffection and insurrection, caused by their own injustice, incapacity and misrule. Princes are expected to have the power of controlling their own subjects, and if they drive them into rebellion, they must take the consequences." At the same time, the Jaipur State was considered to have acted in breach of its engagements with Government by having allowed an armed confederacy to form against Jodhpur within its territory, and strong remonstrances were addressed to that Darbār; lastly, Dhonkal Singh was required to withdraw from the confederacy, and the nobles settled their differences among themselves.

In 1839 the misgovernment of Mān Singh, the ascendancy of the Nāths, and the consequent disaffection and insurrection reached such a pitch that the British Government was compelled to interfere. A force was marched to Jodhpur, of which it held military occupation for five months, when Mān Singh executed an engagement to ensure future good government. One of the articles runs thus:—"A British Agent having been appointed at this capital, tyranny or oppression

* Reduced in 1847 to Rs. 12,000 in consideration of the cession to Government of the fort and district of Umarsot—see footnote to page 68 *supra*.

* An obligation converted in 1845 to an annual payment of Rs. 1,15,000 towards the Jodhpur Legion, which was then raised. The Legion mutilated in 1857, and its place is now supplied by the 43rd (Rinpura) Regiment—see Part III, Chapter VI. of this volume.

shall not be suffered towards any person; no interference shall be exercised in regard to the six sects of religionists; and there shall be no destruction of life among the animals held sacred in Mārwar." This engagement was a personal one and ceased with Mān Singh's life on the 5th September 1843. He left no son, natural or adopted, and one Rānī, four concubines, and a slave girl were immolated on the pyre with him. By the choice of his widows and the nobles and officials of the State, confirmed by Government, Takht Singh, chief of Ahmadnagar, became Mahārājā of Jodhpur, the claims revived by Dhonkal Singh being set aside. This succession fulfilled Tod's declaration that "the race of Ajit must utterly perish unless a scion from the uncontaminated stem of Idar be grafted upon it, and then it may revive."

Mān Singh was a man of remarkable patience, fortitude and constancy, but also of cruelty. In the school of adversity he learnt to master, or rather disguise, his passions, and, "though he showed not the ferocity of the tiger, he acquired the still more dangerous attribute of that animal, its cunning." He had so long acted the maniac that he had nearly become one. On the other hand, Mr. Wilder, after much personal communication with him in 1822, observed in his despatch to Government, "Rājā Mān Singh is undoubtedly a man of superior sense and understanding," while Captain Tod, who met him in 1819, found him dignified, courteous and well-read in history.

Under Mahārājā Takht Singh's rule, the affairs of Mārwar fell into the utmost confusion, and from the time of his accession to power he never relaxed his endeavours to resume the villages which his predecessor had been compelled to restore in 1839; but he was a loyal chief and did good service during the Mutiny, receiving in 1862 the usual *sanad* guaranteeing to him the right of adoption. Four years later, he agreed to cede lands for railway purposes, yielded to the British Government all rights therein short of those of sovereignty, and relinquished duty on goods passing through the State without breaking bulk; while in 1868 he concluded an extradition treaty with Government, which was subsequently modified by the agreement of 1887.

His unjust confiscations and exactions led to constant disputes with his nobles which terminated in 1868 in open hostilities between the parties. The principal Thākurs solicited the interference of the British Government who, while giving them to understand that such interference, if found necessary, would be carried out in a manner calculated to bear down all opposition, informed the Mahārājā that, unless he consented within a given period to be guided by the advice of the British authorities, he would be deprived of all power for the rest of his life. Under these circumstances Takht Singh signed an agreement, by which he appointed a ministry to conduct the affairs of the country and placed at its disposal fifteen lakhs of rupees for public expenditure; he also bound himself (i) to manage all the *khālea* villages, and exercise the civil and criminal

jurisdiction therein, through the ministers; (ii) to restrict his private expenditure to a certain sum; (iii) to abstain from interference with the established jurisdiction of his nobles; (iv) to assign suitable allowances for the maintenance of his sons; and (v) to abide by the decision of Government in regard both to the *hukmnāma* or succession tax to be levied from the Thākurs generally and to the disputes between him and certain of their number.

In 1870 he leased to Government the Jodhpur portion of the salt-lake at Sāmbhar, but a few months later (October 1870), at Lord Mayo's *darbār* in Ajmer, there was an unfortunate dispute about precedence with the Mahārānā of Udaipur, and Takht Singh declined to attend. In vain did the Political Agent and his own son (Jaswant Singh) remonstrate with him, and, after waiting for about an hour, the Viceroy held the *darbār* without him. For this want of respect to Her Majesty's representative, he was directed to leave Ajmer at daybreak the following morning, the friendly ceremonies usual on such occasions were omitted, and it was eventually decided that his salute should be reduced by two guns. Lord Mayo showed his sense of the loyal feeling of the Mahārājā's son by receiving him in private audience after the *darbār*.

In 1872 Zorāwar Singh, the second son of Takht Singh, took possession of the town and fort of Nāgaūr in the hopes of establishing by force of arms his claim to be considered heir to the *gaddi*, on the plea that his elder brother had been adopted to Ahmadnagar, and that he was the first son born to the Mahārājā after his accession to Jodhpur. The insurrection was put down without bloodshed, and Zorāwar Singh, whose claims were unsupported by the nobles and finally negatived by Government, was required to reside at Ajmer.

Mahārājā Takht Singh died on the 12th February 1873, when he was succeeded by his eldest son, Jaswant Singh II, who was duly installed on the 8th March of the same year. A liberal provision was made by the latter for the numerous family left by his father; this was considered inadequate by some of the members, and attempts to excite disaffection were made by them, but these ceased on its being understood that opposition to the legitimate authority of the Mahārājā would be visited with the severe displeasure of the Supreme Government.

The new administration was distinguished by the vigour and success with which dacoities and crimes of violence, formerly very numerous, were suppressed. Up to 1883 the border districts were in a very disturbed state, and active measures were necessary to restore order and bring the lawless Thākurs and tribes to book. Thus were pacified: Jālor in the south in 1874 and again between 1879 and 1882, the outlawed Thākur Sārdul Singh of Rewāra being executed in September 1882; Lohiāna in the south, also in 1882, the village, which for generations had resisted authority and been the chief resort of predatory Bhils, being razed to the ground in the following year and replaced by one called Jaswantpura; Bardwa on the Jaipur border in 1882, a defiant village of Rājput robbers; and Boyātra and Sānkra in the west in 1883.

The year 1884 marks the termination of a period of internal disorder and the commencement of an epoch of political regeneration. The civil and criminal powers of the principal *jāgīrdārs* were regulated and defined; the courts throughout the State were reorganised; the system of farming out the land revenue was abolished; the village boundaries, as well as the borders of neighbouring States, were demarcated; a forest department was constituted; several important public works, including a large extension of the railway, were carried out; Government post offices were multiplied, and the Darhūr became dependent on them instead of employing its own runners; the financial and customs' systems were remodelled, transit-duties being partially abolished in 1886 and entirely in 1891 (save on opium and intoxicating drugs); education received a great stimulus; vaccination spread; numerous dispensaries were built; and an admirable force of cavalry was raised for the defence of the Empire. In fact, in every department a wise and progressive policy was pursued.

No account of the events of the above period (1884—92) would be complete without mention of two officers to whom credit is due for the improvement in the administration above recorded, namely Colonel P. W. Powlett and Mahārāj Pratāp Singh*. The former's connection with Rājputāna began in 1868, and he was Political Agent, or Resident, of Jodhpur almost uninterruptedly from January 1880 to April 1892; his services earned the approbation of the Government of India, and were of the highest value to the people of Mārwar, among whom he is still affectionately remembered. Mahārāj Pratāp Singh was the brother of the ruling chief and, save for fourteen months—August 1881 to October 1882—the chief minister (*Musāhib Alā*) of the State; his personal energy and his naturally great influence with his clansmen contributed largely to the suppression of dacoity and other successful issues, and he is well known both in India and England as the popular Mahārājā of Idar (in the Bombay Presidency).

As for Mahārājā Jaswant Singh himself, no chief could have better upheld the character of his house for unswerving loyalty to Government, and the two fine regiments of Imperial Service cavalry raised by him between 1889 and 1893 are among the evidences of this honourable feeling. He was created a G. C. S. I. in 1875, and was invested by H. R. H. the Prince of Wales (now His Majesty King Edward VII) on the 1st January 1876, and his salute (ordinarily seventeen guns) was raised first to nineteen, and next to twenty-one guns. He died on the 11th October 1895, and his loss was widely mourned; he is remembered by all for his never-failing generosity, largeness of heart, and sympathy with all classes, and as one of the most loyal feudatories of the Crown, who not only recalled the best traditions of his house, but assimilated to them the liberal ideals and the strenuous energies of the system of British government.

* Now Major-General His Highness Mahārājā Sir Pratāp Singh of Idar, A.D.-C. G.C.S.I., K.C.B.

In the Jodhpur coat-of-arms, the tinctures represent the country flag—the *panchraṅga* or five-coloured; and the “canton dexter of the fourth, three ears of barley proper,” records Sher Shāh’s saying, after having nearly perished with his eighty thousand men in the waterless and thirst-compelling deserts of Mārwar, that he “had nearly lost the empire of Hindustān, for a handful of barley.” The charge of the hawk represents the tutelary goddess, the winged (*pankhonī*) Devī or Durgā (also styled Manasā, Vindhyavasini, and Rāchitrās-nā), who in that form has appeared on several critical occasions to assist the founders of the State. Ever since Ras Jodha, nearly four hundred and fifty years ago, obeyed the mandate of an ascetic and left the old Parikhār city of Mandor for the “hill[†] of birds” (*bhākar chiryā*), the palaces of red sand-stone have grown and thickened. It is therefore only seemly that the birds, who through the long sunlit hours unceasingly circle with outstretched pinions the topmost towers of the grim old fort, should find a place as supporters of the shield of Mārwar. The motto *Rana bankā Rāthor*, meaning “the Rāthor invincible” (or stubborn) “in battle,” is taken from the old quatrain:—

No host so good as the Deora;
No donor so liberal as the Gaur;
In pride none equal the Hāra;
In arms none surpasses the Rāthor.

The State is rich in antiquarian remains; the most interesting are to be found in the Bāli, Desuri, Dīdwāna, Jālor, Jaswantpura, Jodhpur, Mallāni, Nāgaur, and Pāli districts, and are described in Part II, Chapter XXII, of this volume.

* Changed on the advice of astrologers to Umed Singh in 1905.

† The hill on which stands the fort of Jodhpur; it was also called *Chiryā tāk* because it was the favourite retreat of the hermit Chiryā Nāth.

CHAPTER III

THE PEOPLE.

The first enumeration of the population took place in 1881 when the total number of inhabitants was returned at 1,757,618, or fifty to the square mile. The above figures were probably somewhat below the mark, as the operations being quite a novelty, were opposed by the people, especially the hill tribes, and were imperfectly understood by the staff employed.

Census of
1881.

The next census was taken in 1891, and the population was ascertained to be 2,528,178, or seventy-two persons per square mile. The remarkable increase of 43·8 per cent. (as compared with twenty-one for Rājputāna and nine for the whole of India) was due partly to improved methods of enumeration but chiefly to the absence of famine, the opening up of the country to commerce by means of railways, and the introduction of a better system of Government.

Census of
1891.

At the last census, taken on the 1st March 1901, the population was found to number only 1,935,565, or fifty-five persons to the square mile, and the decrease of 23·4 per cent. may be ascribed to a succession of indifferent, if not actually bad, seasons culminating in the terrible famine of 1899-1900 and an exceptionally virulent epidemic of malarial fever in the latter half of 1900. An examination of Table No. XX in Vol. III-B. will show that, with the exception of Sānkra, all the districts suffered, particularly Nāgnaur, Bilāra, Merta, Jodhpur, Sānchor, Pachbhadrā, Jaswantpura and Pāli, each of which lost at least one-fourth of its population during the decade. The extraordinary increase of 158 per cent. in Sānkra is said to be due to the immigration of Bhāti Rājputs and others from Jaisalmer, while the small decrease of 3·4 per cent. in Mārot in the north-east was the result of comparatively easier agricultural conditions during the ten years, especially in 1899; in Sāmbhar, where the decrease was 10·5 per cent., the famine was less severely felt and a large population is always supported by the salt-works. Of the four main religions, the Animists (*i.e.*, Bhils and Girāsins) were the heaviest sufferers, losing two-fifths of their members, but Hindus lost nearly twenty-four, and Musalmāns and Jains each between seventeen and eighteen per cent.

Census of
1901.

The number of persons per square mile has already been mentioned, namely 50 in 1881, 72 in 1891, and 55 in 1901, but the figures for the different districts vary considerably. Thus at the last census, Bāli in the south-east and Mārot and Parbatsar in the north-east all supported more than one hundred persons per square mile, while at the other extreme was Sheo on the western border with only twelve.

Density.

Of the total population enumerated in 1901, no less than 28.6 per cent. were born in the State, and another one per cent. in some other part of Rājputāna (chiefly Jaipur and Bikaner); the rest came mostly from the Bombay Presidency and the United Provinces. The extent to which Jodhpur has lost its population by migration is indicated by the following figures. While she received from other Rājputāna States 20,126 persons (12,973 of whom were females), she gave them 45,671 persons (28,047 females), so that her net loss was 25,545 persons, of whom, nearly fifty-nine per cent. were females. The movement was greatest with Jaipur, but the gain and loss with this State were fairly equally divided, the actual loss to Jodhpur having been 460. The heaviest loss was to Sirohi, which State received 8,605 more persons (mostly women) than it gave. Similarly in transactions with other parts of India, emigration has been on a much larger scale than immigration; thus, while the emigrants

* Including Sāmbhar (population 10,873), which is under the joint jurisdiction of the Jodhpur and Jaipur Darbārs.

numbered at least 155,946,* the immigrants were only 5,748, or a net loss to Mārwar of 150,198 persons. The Bombay Presidency gained nearly 60,000 persons, Central India more than 34,000, Ajmer-Merwāra 28,000, and the Punjab 12,000. The statistics relating to birthplace show (i) that, in its intercourse with other States of Rājputāna and with Central India, Jodhpur sends out more females than males, and (ii) that in its dealings with other parts of India the reverse is the case. The excess of females over males emigrating to adjacent territories is largely due to the marriage customs of the Hindus which necessitate alliances with septs not represented in the State, while those who wander further afield (namely to the Punjab, United Provinces, Central Provinces, Bengal, Baroda, and even Madras and Mysore) are men who settle there either as traders or sepoys. For the rest, it is a well-known fact (i) that among the agricultural population of the western deserts emigration is an annual event, whatever be the nature of the season, as there is practically but one harvest, the *kharif*, gathered in September or October, after which the people always leave in large numbers to find employment in Sind and elsewhere; (ii) that the recent famines and scarcities caused more than the usual amount of emigration; and (iii) that the traders known as Mārwaris are famous for their enterprise and the important part they play in the commerce of the Empire, there being hardly a town where the thrifty denizen of the sands of western and northern Rājputāna has not found his way to fortune from the petty grocer's shop in a Deccan village to the most extensive banking and broking connection in the commercial capitals of both eastern and western India. Of the 2,111,255† persons returned in 1901 as having been born in Jodhpur, nearly 90½ per cent. were enumerated in the State itself, more than 2 per cent. in other Rājputāna States, more than 6½ per cent. in Provinces adjacent to Rājputāna, and 0·7 per cent. in other parts of the Indian Empire.

The registration of births and deaths was started at Jodhpur city in January 1894, but has not yet been attempted in any of the towns or districts. The statistics relating to deaths are believed to be fairly accurate, the necessary information being easily obtainable through the gate-keepers, but those dealing with births are of little value as they are based chiefly on the reports of *dhāis* or midwives, whose services are not requisitioned by all classes of the community. The people generally are reticent regarding their domestic occurrences, especially the birth of a daughter—an event still regarded as a family misfortune; but it is satisfactory to note that in each of the last four years births have exceeded deaths. During the period (1894-1905), for which returns are available, the yearly average number of births has been 2,107, or a rate of about thirty-four per mille, and of deaths

Vital
statistics.

* A large number of persons enumerated outside the Province gave their birthplace as Rājputāna, without mentioning any particular State. Some must have been born in Jodhpur.

† This is the actual number returned; there may have been more born in the State—see footnote above.

2,380, or a rate of thirty-nine per mille. In 1896 only 854 births were registered, and in 1905 as many as 3,332; similarly, 931 deaths were reported in 1897 and 8,363 in 1900. The actual figures for 1905 were 3,332 births, or a rate of fifty-five per mille, and 2,089 deaths, or a rate of thirty-four per mille; of the deaths more than half were ascribed to malarial fever, fifteen per cent. to dysentery or diarrhoea, and about eleven per cent. to respiratory affections.

The principal diseases are malarial fevers, especially common in the autumn, when the extremes of temperature are first experienced and the ground is rapidly drying after the rains, and skin affections, due either to the want of water for cleansing purposes or to bad water and indifferent food. Bronchitis and pneumonia are often prevalent in the cold months, in consequence of the insufficient clothing of the people, and dysentery and diarrhoea in the rainy season. Guinea-worm (including threadworm among children), dyspepsia, congestion of the liver, enlarged spleen, inguinal hernia, rheumatism, cataract, non-malignant and mycetomatous tumours, and venereal diseases are all fairly frequently met with. Of epidemics, smallpox, for which the most fatal months are March-June, was formerly very common, but the virulence of the disease has been much reduced during recent years by vaccination. Cholera is comparatively rare, especially in the western part of the State, but severe outbreaks occurred in 1887, 1892, 1896 and 1900. In the first of these years, 2,090 deaths were reported, chiefly from the capital and the districts of Bāli, Jālor, Pachbhādra, Sāmbhar and Sojat; in 1892 a considerable portion of the State was affected, and the deaths numbered 8,473; in 1896 the disease appeared at Nāwa on the Sāmbhar lake, spread to sixteen districts, and altogether claimed 2,327 victims; while between December 1899 and September 1900 nearly 8,000 deaths occurred.

Bubonic plague (*mahāmārī* or *gānth-kī-mandagī*) is believed to have visited this State for the first time in July 1836, when it broke out at Pāli and spread thence to Jodhpur city, Sojat, and several other places, disappearing finally at the beginning of the hot weather of 1837. The fact that it first started among the Chhīpas or cloth-stampers led to the supposition that the germs were imported in silks from China. An interesting account of the outbreak and of the measures taken to combat it will be found in Hendley's *General Medical History of Rājputāna* (pages 148—69), and in Adams' *Western Rājputāna States*. As for the more recent epidemic which started in Bombay in 1896, it may be said that, excluding a few cases discovered at railway stations, Jodhpur remained free for nearly five years. The disease, however, appeared in an indigenous form at Bāli in February 1901, at the adjacent village of Sewāri in the following month, at Duthāriya in February 1902, and at Pīpār in April 1903; a few cases have also occurred at other places. Up to the end of March 1907, altogether 947 seizures and 695 deaths had been reported. With the object of keeping plague out of the State, a special staff is maintained at all the important railway stations and

the Swāmis 1,064; while the opposite extreme is found in the cases of the Agarwāl and Mahesri Mahājana who had respectively only 487 and 494 females to 1,000 males.

At the last census, about 39 per cent. of the people were returned as unmarried, nearly 45½ as married, and more than 15 per cent. as widowed. Of the males, about 46 per cent., and of the females only 31½ per cent. were single. There were altogether 1,103 married females to 1,000 married males, and 1,321 widows to 1,000 widowers. The relatively low proportion of spinsters and the high proportion of widows are the results of the custom of early marriage among many castes and of enforced widowhood among all the higher sections, while the excess of wives over husbands is due partly to polygamy among the wealthier members of the Hindu and Musalmān communities and among the Bhils, partly to the prevalence among most of the lower castes of *karewa* or the marriage of a woman with her deceased husband's younger brother, and partly to the fact that in adverse seasons males emigrate more freely than females. Taking the population by religions, it is found that, among the males, about 48 per cent. of the Musalmāns and Animists, nearly 52 per cent. of the Jains, and more than 54½ per cent. of the Hindus were married or widowed, and that, among the females, the similar percentages were Musalmāns 59, Jains nearly 65, Animists 69, and Hindus about 69½. Marriage is strictly obligatory on all women by religion, though among the Jains some take a vow of celibacy, but among male adults there are not a few who prefer a life of bachelorhood.

Early marriages are common, but do not necessarily mean the commencement of conjugal relations. Thus, of all children under fifteen years of age, more than one-sixth were married or widowed, the percentages for the different religions being Musalmāns 15·3, Jains 17, Hindus 18·8, and Animists 21·4; again, of girls under fifteen, more than 22½ per cent. were wives or widows, namely Musalmāns 14·5, Jains 19, Hindus 23·4, and Animists 32·3. These figures, which have been taken from the last census returns, show that early marriages are most prevalent among the Animists, but a mistake appears to have been made, for it is well known that the reverse is the case, and that the Bhils who form the bulk of the Animistic population seldom marry their daughters before they are fifteen or sixteen and frequently not until they are eighteen or twenty. Divorce is allowed by Muhammadan law and among the Bhils and lower castes of the Hindus, but is not often resorted to, while polyandry is quite unknown.

The language spoken by more than 96½ per cent. of the people is Mārwarī; another 1¼ per cent. speak Jaipurī, and a further 1·16 per cent. Sindī. Mārwarī is by far the most important of the four main groups of Rājasthānī, whether we consider the size of the area in which it is the vernacular, the number of its speakers, or the extent to which it has spread over India. It has many varieties, of which the best known are the Thālī or western Mārwarī of the desert, the Mewārī of the Udaipur State, the Bāgrī of north-east Bikaner

(often considered a distinct dialect), and the Shekhāwatī of north-west Jaipur. At the last census, Mārwarī in one or other of its forms was returned as the language of more than five million persons residing all over India. Jaipurī is another of the four chief groups of Rājasthānī, while the dialect of Sindī spoken in the western portion of Jodhpur is called Thareli.

Of castes and tribes found in the State, the following were the most numerous at the last census:—Jāts (219,539); Brāhmaṇas (191,935); Rājputs (180,883); Mahājans (171,052); Balais (141,947); Rebāris (66,809); Mālis (55,233); Cbākars (55,111); Kumbhārs (50,799); Bhils (37,697); Bishuois (37,273); and Sirvis (31,102).

Castes, tribes etc.

The Jāts form more than one ninth of the entire population and are found in every district of the State, but are most numerous in the Jodhpur, Mallāni, Merta, Nāgaur and Parbatsar *hukūmats*. They are believed to be of Indo-Scythian stock, and have been identified with the *Zanthii* of Strabo and the *Jatii* of Pliny and Ptolemy. Three main divisions are recognised, namely (1) the *asli* or pure Jāts, claiming no Rājput ancestry but supposed to be descended from the hair (*jat*) of the god Siva, and comprising two endogamous sections, Godāra and Pūniya, so called after the names of their founders; (ii) the joint Jāt-Rājput stock; and (iii) the *anjna* or those of inferior social rank. The last two divisions used to intermarry but do not now do so. The Jāts are strong and hard-working, and the best cultivators in the State, famed for their diligence in improving the land. According to the saying "*Jāt jahān thāt*", a village inhabited by them is always expected to be flourishing, and they are assisted in the fields by their women and children:—"The Jāt's baby has a plough-handle for a plaything." They are usually vegetarians, but have no decided objection to a meat diet; by religion they are Vaishnavas, worship the plough and the cow, and are served by Chenuiyāt Brāhmaṇas. Socially they stand at the head of the widow-marrying castes; polygamy is allowed, but a man may not marry his wife's sister while his wife is still alive; early marriages are regarded with favour, though the general custom is of adult marriage; and divorce is permitted, an announcement in the presence of the caste members being deemed sufficient, but is seldom resorted to. An endogamous *panth* or sect, known as Jasnāthi after its founder, Jasnāth, who lived about 1488, is found chiefly in Pānchla, a village of the Nāgaur district; the members can be distinguished by their yellow head-dress, the black cord round their neck, and their practice of burying their dead instead of burning them. Another small sect is that of the Satnāmis or devotees of truth who by their distinctive profession of veracity seem to imply that they have the exclusive monopoly of this ancient virtue. Most of the Jāts wear round the neck a silver charm depicting Tejājī on horseback with his sword drawn and a snake biting him on the tongue. Tejā* was a Jāt of Karnāl in Nāgaur who, after a fight with the cattle-lifting Mers, died

Jāts.

* For a further account of this popular hero, see Vol. I-A. of this series, page 34.

The Brāhmans form nearly ten per cent. of the population, are found throughout the State and are numerically strongest in the Jodhpur, Jālor, Merta and Nāgaur districts. They stand first on the list of social precedence, and the principal divisions represented in Mārwar are the Śārried malas, the Pushkarnas, the Nandwāna Bohrās, the Śrīmālīs, the Sānchīs and the Pāliwāls.

south. The Sānchoras take their name from the Sānchor district in the
belong to, and are found chiefly in Mallāni; they consist of seven *gotras*,
as the Śrīṅg the Vallabhāchārya sect, and are of almost the same status
they also have imālis, being very strict in the matter of food and water;

The Nandwāna Bohrās, like the Śrīmālīs and Pusbkarnas, belong to the Gurjara (Gūjar) division of the Panch Drāvīda Brāhmins, but

some of them, known as Singhīs, are outcastes, owing to conversion to Jainism.

The Chenniyāts comprise six endogamous septs of the Panch Gaur Brāhmans, fused with but partial success into one community by Mahārājā Sawai Jai Singh of Jaipur in the early part of the eighteenth century in commemoration of his *asvamedha* or horse-sacrifice; they can eat together, but do not intermarry. The six divisions are (i) the Dāimas or Dādhichas, a cultured class whose original seat was at Manglod in Nāgaur; (ii) the Gūjar Gaurs, reputed descendants of Gautama Rishī and slightly inferior in status to the Dāimas in consequence of their having formerly been priests to the Abirs, etc.; (iii) the Pārikhs, some of whom are priests to the Kaimkhānis, while others are cultivators or temple servants; (iv) the Khandelwāls, who are said to have come from Khandela in Jaipur and are mostly agriculturists; (v) the Sārsuts, who are called after Saraswatī, the Hindu Minerva, and whose ancestors are supposed to have accompanied Rao Siāhji from Kanauj; they live on charity or cultivate the land, but the majority are in private service; they are not very strict in their observance of caste rules, eating and smoking with Baniās, Khattris and Kāyasths; and (vi) the Gaurs, who are not very numerous and have been excluded from the Chenniyāt community of Mār-wār during the last sixty or seventy years in consequence of their having intermarried with the Sikawāla Brāhmans of Jaipur. Of the above six septs, the Pārikhs, Khandelwāls and Sārsuts may be considered second-grade, and the Gaurs third-grade Brāhmans.

The Purohīts or Rājgurs are numerically stronger than any of the other main divisions of Brāhmans; they hold extensive tracts of land on the *sāsan* tenure, and are hereditary priests and match-makers to the Rājputs, from whom (as well as from Baniās) they take food. They do not beg, but accept without murmur what is offered to them in charity; they till their own lands, being assisted by their womenfolk, and the wearing of the sacred thread and the shaving of the head and face as a sign of mourning are alike optional with them. A section known as Nātrāyat has lost caste from having recognised *nātra* or widow marriage.

The Pāliwāls take their name from the town of Pāli which they held in grant from the Parihār chiefs of Mandor before the establishment of Rāthor power in Mār-wār. They do not observe the festival of Rākhi on the full moon of the month of Sāwan (July-August) because their ancestors are said to have been killed in large numbers by Muhammad Ghorī on that day, and they worship, among other things, the bridle of a horse on the Dasahra, probably in memory of their former state when they were chiefly robbers conducting their excursions on horseback. At the present time they are either cultivators or money-lenders, and take large sums of money on the occasion of their daughters' marriages, especially when the bridegroom is young or a widower.

The Rājputs form more than one-eleventh of the population, but 7,788 of them, or about four per cent., are Musalmāns, found chiefly Rājputs.

in Mallāni, Nāgaūr, Sānchor and Sheo; they, however, scarcely differ in their customs and manners from the Hindus. The Rājputs proper thus number 173,095, and are the fighting, land-owning and ruling caste, of Indo-Aryan origin—fine brave men, proud of their warlike reputation and their ancestry, and very punctilious on points of etiquette. The custom of costly infant marriages among them is happily becoming less common under the influence of the Sabhā or committee, organised by and named after the late Colonel Walter in 1888, which has fixed the minimum age of marriage at eighteen for a boy and fourteen for a girl, and regulates the expenditure by the income of the bride's father. The Rājputs are addicted to opium and liquor, accept food from almost any clean caste, and worship Mātājī, the shield, the sword, the dagger and the horse. Usually they are either *jāgīrdārs* or *bhūmiās*, but many are landless and have rather dropped behind in the modern struggle for existence in consequence of their rooted aversion to any pursuit other than that of arms or government. The *jāgīrdārs* follow the rule of primogeniture, and the *bhūmiās* that of gavelkind. The dominion over land being a criterion of superiority, hypergamy exists to a limited extent; though the tradition of common ancestry makes the entire tribe one vast endogamous group.

As is well known, there are three great divisions of Rājputs, namely, the Sūrajbansi or Solar race, the Chandrabansi or Lunar race, and the Agniculas or Fire tribes; and representatives of each are to be found in Mārwar. In the Solar group are the Rāthors, the Kachwāhas and the Sesodias, and in the Lunar the Bhātis, while all four of the Fire tribes,—the Chauhāns, the Ponwārs, the Parihārs and the Solankis—are met with. The Rāthor clan of course takes the first place from every point of view; it comprises more than one hundred septs, the chief of which are Mertia, Jodha, Udāwat, Champāwat, Kumpāwat, Karnot, Jetāwat and Karamsot. The chief septs of the Kachwāhas found here are Shekhāwat, Narūka and Rājāwat; of the Sesodias Rānāwat, Chondāwat, Shaktāwat and Abāriya; of the Bhātis Jaisu and Raolot; of the Chauhāns Deora, Hāra, Sonigara, Nādol, Pūrbia and Sānchora; of the Ponwārs Sodha, Sānkla and Bhūyal; and of the Parihārs Enda.

△ The Mahājans or Baniās form nearly nine per cent. of the total population, and are numerically strongest in the districts of Bāli, Desuri, Jālor, Mallāni, Nāgaūr and Sojat; nearly four-fifths of them are Jains. The Hindu Vaisyas occupy a slightly higher position in the social scale than the Jain, as among them adult marriages and the use of certain vegetables regarded as unclean or of food prepared by non-Brāhman castes are forbidden. The principal divisions found here are Oswāl, Mulesrī, Porwāl, Sarāogi and Agarwāl.

The Oswāls are by far the most numerous (107,926), and more than 98 per cent. of them are Jains. They are said to be the descendants of a number of Rājputs of different clans who were converted to Jainism in the second century, and they take their name from the town of Osi or Osiān, the ruins of which are to be found

about thirty miles north of Jodhpur city. The Oswāls are mostly traders and money-lenders, but some are in the service of the Darbār and others are *Kāmdārs* or managers of *jāgīr* estates; their chief septs are Mohnot, Bhandāri, Singhī, Lodhā (with four sub-divisions, one of which is named after Akbar's finance minister, Todar Mal), and Mohtā (of whom the Bhandsālis were originally Bhāti Rājputs, and are regarded as the *chāudhris* or headmen of the Oswāls).

The Mahesris number 20,288 and are all Hindus; like the Oswāls, they trace descent from Rājputs, chiefly of the Chauhān, Parihār and Solanki clans. The name is derived from Mahādeo or Mahesh in whom they believe. They comprise seventy-two exogamous sections, ^{Gulāb} from the use of liquor and meat, and will not touch onions, ^{dry of a} carrots; by occupation they are traders, contractors and ^{hārs for} some having agencies in the remotest parts of India. ^{sters, brick}

The ^{is said to} (10) are said to have been originally Rājputs of ⁱⁿ of water jars. ^{red} they embraced Jainism some seven hundred years ago. ^{to some authorities, they take their name} to some authorities, they take their name from the superstitious ^{in the Bhilwāra zila of the Udaipur State.} in the Bhilwāra zila of the Udaipur State. ^{they keep a Kumhār, a} with the Oswāls, and are found principally ^{as right."} The caste in Mārwarī districts where they lend money to the first six of which are H. ^{ant rates of interest and are consequently} each is divided into ^{ull.} Another noteworthy fact in connection with ^{occupy the} that they consider a daughter a valuable commodity and are exempt ^{demand a very high price when giving her in marriage.} demand a very high price when giving her in marriage. ^{and the Sarāogīs (13,195) are, like the Porwāls, all Jains; they} and the Sarāogīs (13,195) are, like the Porwāls, all Jains; they comprise eighty-four sections. The word is said to mean one who abhors liquor, but, according to others, is a corruption of *shrāvuka*, a lay worshipper of Buddha or a Jain. The Sarāogīs are very strict in their observances, and carry the reverence for animal life to an extreme. They neither eat nor marry with the Oswāls, nor engage Brāhmins to officiate at their weddings, but are served by priests of their own caste. Further, they forbid the use of ivory bracelets by their women, bathe before breakfast, take their evening meal before sunset, burn no fuel without first washing it, and do not use lamps at night for fear of injury to insects.

The Agarwāls (11,033) all returned themselves as Hindus; they trace their origin to a Rājā Agar Sen whose capital was at Agroha in the Punjab. The story runs that Agar Sen had seventeen sons, and, being desirous of marrying them to the eighteen snake-daughters of a Rājā named Basak, another son was formed from the body of the eldest, and thus the couples were united; hence the Agarwāls are divided into 17½ clans, the half section eating but not marrying with the others, while another section, known as the Nārūaul Singhīs, forms the *mutasaddī* or official class. The rest are engaged in trade, and many of them are very enterprising, being found in almost all the cantonments and distant places under the name of Mārwarīs.

The Balais or Bhāmbis form rather more than seven per cent. of the entire population, and are found everywhere; they are Balais.

also called Meghwāls or descendants of Megh, who is supposed to have been a Brāhman. They are among the very lowest castes, and are workers in leather, village drudges and to a small extent agriculturalists; those who remove the carcasses of dead animals from villager-like towns are called Dheds. Four main divisions exist, namely (i) of or original, (ii) Māru, (iii) Jāta, and (iv) Chāranis, the first being composed of descendants of Rājputs, Jāts and of the Sabhā or Jiv; the two first divisions intermarry, but the Colonel Walter endogamous. Among the women, the Mārus wear at eighteen Jāts no bracelets, while the Chāranis dress like the former in yellow clothes. The Bhūmbis are Vaiṣṇava and addicted to opium worship. Rāmdeoīs are called Bhagwāns from the caste, and worship coloured head-dress; they hold the *tulsi* plant and the horse. Usually sacred, but eat the flesh of cows and other animals. Polygamy is allowed, but a man cannot marry the sister of his deceased wife's sister. The dead are buried, the rule of primogeniture, and the inheritance of land being by the eldest son.

The Rebāris, also called Rāikās in the north, exist to a limited extent, and are properly called the entire tribe one. They assert that their ancestor was brought in from the north to take care of the first camel which was sent to the divisions of Rājputs, Pārbatī for her amusement. They have two main divisions, the Lunar race, and Chālkīā; the former deals only in camels, and occupies a position in that its members can marry the daughters of the Kachwās without giving their own in return. The Chālkīās keep large flocks of sheep and goats, and are numerous in Bāli and Desuri. The former are known as Pitalias from their women generally wearing brass ornaments. Among the Rebāris, the Sāmāris, or descendants of Sāmar, alone claim pure extraction, while the others comprise a combination of several Rājput tribes, such as the section known as Paribār which has five subdivisions named after the sons of Nāhar Rao; the Rājā of Mandor.

The Mālis form nearly three per cent. of the population; those living in the vicinity of towns are market-gardeners, and the rest are agriculturalists. They comprise two intermarrying classes—the *Mor* (original) Mālis, of whom less than half a dozen families now exist, and the Māli Rājputs, the descendants, it is said, of certain Rājputs who had been imprisoned by Muhammad Ghorī and who, on obtaining their release through the good offices of one of the emperor's gardeners, by name Bāba, adopted the profession of gardening. Widow marriage is allowed, but not with the deceased husband's brother, and the fee paid by the new husband is always made over to the widow's parents. Persons dying unmarried are sometimes buried, but in all other cases the corpses are burnt.

The Chākars or Golās are the illegitimate offspring of Rājputs on whom they attend as hereditary servants; those who are connected with the ruling family are considered to be of a status somewhat superior to the others. They eat the leavings of Rājputs only;

and of no other caste; no caste higher than that of the Oswāls accept food cooked by them, and none lower than that of the Nais offer food to them. The females are termed Golis, are chiefly employed as maid-servants, and, as Tod has remarked, are "the great which is of loss of liberty." They are often admitted into the *zanāna* (of whom ^{one} by the Rājput nobles and chiefs, who pay a large sum of regarded as the ^{one} parer ^{one} husbands, and are then called *pardāyats*.

The Mahesris ^{are} ^{being} generally attached to their original name. Oswāls, they trace promoted to be *pāsbāns*, they take their seats just Bihār and Solanki. In J'lpur city, the temple of Kūnj Bihārījī, the tank known as Gulāb Sāgar, and the Gird Kot were all constructed by or in memory of a famous *pāsbān* called Gulāb Raijī.

The Kumhārs form more than $2\frac{1}{2}$ per cent. of the population, and are potters, brick burners, village servants and agriculturists; the word is said to be derived from the Sanskrit *kumbhakāra*, maker of water jars. Their social standing is low, but they are a useful class and, as the proverb tells us, an object of solicitude to the superstitious traveller:—"If you go out without breakfast, always keep a Kumhār, a screech-owl, a monkey and a deer on your right." The caste in Mārwar consists of the following seven groups, the first six of which are Hindus and the last Muhammadan, while each is divided into a number of exogamous sections. The Khetirs occupy the highest position and do not marry with the others; they are exempted from every kind of forced labour, are almost entirely agriculturists, keep bullocks instead of donkeys like their brethren, and their women are allowed to wear silver ornaments. The Bāndās are mere potters, whose women wear ivory bangles; they do not intermarry with the Jātīs, Pūrbias or Mewārās, but can take the daughters of the Mārus without giving their own in return. The Mārus, besides making earthen vessels, keep lime-kilns and are known as Chūngars in that capacity; they do not light the fire in their furnaces with their own hands but employ Bhangis or sweepers for this purpose. The Jālīs cultivate land, carry grain and grass from one village to another on their donkeys, and prepare ropes and twine from the hair (*jat*) of goats and sheep. The Pūrbias are said to have come from the United Provinces and to be vegetarians; they generally gain a livelihood by selling grass and wood, but they also make earthen toys, and cultivate to a small extent. The Mewārās are masons and make millstones, and their females can only wear brass ornaments. Lastly come the Moilās who, as already stated, are Musalmāns, and claim to have originally been Samā Rājputs in Sind; they are potters and agriculturists, and in their religious customs practically Hindus. The Kumhārs eat with the Jāts and other clean Sūdras, but Brāhminans will take no water from the *lotās* of the Pūrbias; they worship the potter's wheel, call in the Srimālī Brāhmins as priests at marriages, but not at deaths, and in the case of widow marriages pay the fee to the relatives of the deceased husband. The Bāndās and Pūrbias observe the custom of keeping a would-be son-in-law as a *ghar jamāi* to work for some time as an apprentice.

Kumhārs.

For an account of the Bhils reference is invited to Part V of Volume II-A of this series. In Mārwar they are found in every district, except Mārot, Nāwa and Sāmbhar, but are most numerous in Mallāni, Jaswantpura, Sānchor and Jālor; they belong almost entirely to the village watchman and cultivating classes, and are divided into about sixty exogamous septs, some of which claim to be the original or unmixed stock, while others take their name from Rājput clans. Each sept has a recognised headman, and the decisions of *panchayats* in the settlement of disputes are usually obeyed. The Bhils settled on *khālsa* lands have occupancy rights, but as cultivators are idle and thriftless. The women are not allowed to wear silver ornaments, but deck themselves with lac bangles, brass anklets and beaded necklaces; the favourite ornaments of the men are ear-rings, and charms and amulets on the right fore-arm. Marriage usually takes place within certain groups or geographical limits, and the Bhil frequently has two wives, who may be sisters.

The Bishnois, though they form less than 2 per cent. of the population, are interesting from the fact that, so far as Rājputāna is concerned, they are found in four States only, namely Jodhpur, Bikaner, Jaisalmer and Udaipur. They were originally Jāts, and derive their present name from their creed of twenty-nine (*bis+nav*) articles which they embraced at the instance of a Ponwār Rājput ascetic named Jāmbhā towards the end of the fifteenth century. These twenty-nine articles are as follows:—(i) and (ii) relate to the purification of women and are very similar to the rules laid down in the Levitical law; (iii) from the time that a child begins to eat grain, it should be bathed daily in water; (iv) be faithful always to one woman; (v) be content with whatever you may possess; (vi) salute one another five times a day; (vii) pray to the deity every evening; (viii) before partaking of food, pour *ghṛ* on the fire; (ix) filter all water used for drinking or bathing; (x) never speak without consideration; (xi) carefully examine all fuel to see that no insect or other living thing is in it; (xii) never give way to anger; (xiii) nor steal; (xiv) nor speak evil of any one; (xv) nor tell an untruth; (xvi) fast on the fifteenth of the dark half of each month; (xvii) always call on the name of Vishnu; (xviii) never take life nor, as far as possible, permit others to do so; (xix) never cut a green tree; (xx) eat only such food as is cooked by those of the sect; (xxi) fix a mark on the ear of every goat and sheep so that its life may be safe, and, as far as possible, make others do the same; (xxii) never castrate a bullock; (xxiii) nor eat opium; (xxiv) nor drink spirituous liquor; (xxv) nor consume *bhang*; (xxvi) nor smoke; (xxvii) nor let indigo touch the body; (xxviii) nor bear enmity to another; and lastly (xxix) so live as to be always prepared for death.

The Muhammadans were in power at Nāgaur at this time, and on not approving of Jāmbhā starting a new religion, told him to instruct some of their tenets in it. He agreed and added the following clauses:—(a) All Bishnois to be buried after death; (b) after

on the name of Vishnu, the words *Allāh Bismillāh* to be repeated ; (c) at marriage ceremonies the *phera* or circumambulation of the fire to be omitted, and when half the ceremony is over, the priest, who has till then been reading from Hindī books, to read from Muhammadan ones ; (d) the top of the head to be shaved ; and (e) the hairs of the beard not to be separated.

All these precepts are not now followed, but the Bishnois certainly form a distinct endogamous caste, comprising almost as many exogamous sections as there are among the Jāts generally, from whom they are distinguished by the discardment of the scalp-lock and the interment of the dead—sometimes in a sitting posture like the Sanyāsīs, and almost invariably at the threshold of the house or in the adjoining cattle-shed. Further, they are strict vegetarians, teetotalers and non-smokers, partial to woollen garments as being at all times pure ; they take neither food nor water from any other caste whatever, and they have their own special priests. Their chief occupation is agriculture, but they also keep large herds of camels.

At the last census the Sīrvīs were found only in Jodhpur and Sirohi, and more than ninety-eight per cent. of them were enumerated in the former State, chiefly in the Bāli, Desuri and Jaitāran districts. The name is said to be derived from the Rāngrī word *sīr*, meaning cultivation, and the Sīrvīs form the chief class of minor agriculturists. They have two endogamous and non-interdining groups (each divided into a number of exogamous sections), namely the Khārdia, the members of which eat flesh, drink wine and bury their dead, and the Janewā, in which the use of meat and liquor is forbidden and the dead are always burnt. Most of the Khārdias wear a thread round their wrist, bound on by the *Diwān* or spiritual head of the community (whose headquarters are at Bilārn) to signify their consecration to Mātāji, and those who have not been thus consecrated may be burnt after death. The Sīrvīs take food from no other caste, employ Joshīs at their marriages but not at funerals, and their widows are allowed to remarry.

Sīrvīs.

The only other castes exceeding 25,000 are the Khātīs or carpenters, some of whom work as blacksmiths (Khāti-lohārs) ; and the Nais, who besides being barbers, play an important part in social matters, as match-makers to the lower classes. The three main groups of the Nais are the Māru, the Baid and the Pūrbia, and of these the second is inferior as the men are the leeches and the women the midwives of the village.

Classifying the population according to religions, we find that in 1901 nearly eighty-three per cent. were Hindus, $7\frac{3}{4}$ per cent. Musalmāns, seven per cent. Jains and rather more than two per cent. Animists, while Christians numbered 224, Brahmos 122, Aryās 61, Pārsīs 55, Sikhs 7, and Jews 3.

Religions.

No attempt was made at the last census to record the numerous sects of the Hindus, but it is believed that of the three main groups—Vaishnavas, Sāivas and Śāktas—the first is most, and the second least numerous in Mārwar. Of independent sects more or less peculiar

Hindus.

to this State and to Bikaner, two have already (page 83) been mentioned among the Jāts, namely the Jasnāthi and the Satnāmi; and the creed of the Bishnois is described at pages 90-91 *supra*. A fourth sect is that of the Dādūpanthis, found chiefly in Jaipur but to a small extent here and in some other States of Rājputāna. A detailed account will be given in Vol. IV-A., because the headquarters of the sect are at Nāraina in Jaipur territory, and it will suffice here to state that the Dādūpanthis are the followers of Dādū, a Nāgar Brāhman who was born in 1544 and died in 1603, and that their chief tenets are the equality of all men, strict vegetarianism and teetotalism, and lifelong celibacy. The sect comprises two subdivisions, namely the Viraktas or ascetics and the Sādhus or Swāmis, *i.e.* celibates, and the latter are not entirely cut off from temporal affairs, several of them being money-lenders and very strict with their debtors. Jodhpur possesses a third subdivision called Gharbāri, but, as its members marry, they command much less respect than the others, and in Jaipur are not recognised as true Dādūpanthis.

Of the 149,419 Musalmāns, more than 92½ per cent. were Sunnis, more than four per cent. Shiāhs, and the rest Wulābis. The Shiāhs are mostly the Bohrā and Khojā traders from the Bombay Presidency and a few Mughal immigrants from upper India. The Musalmāns of Mārwar, speaking generally, retain their ancient Hindu customs and ideas, especially outside the large towns, and command the services of Hindu as well as Muhammadan priests; but in towns where they are numerically strong they have begun to observe certain religious rites in exclusively Islamite fashion.

The Jain sects are the ancient divisions of the Digambaras, whose images are unclothed, whose ascetics go naked, and who assert that woman cannot attain salvation, and the Svetāambaras, who hold the opposite view regarding women, and whose images are clothed in white. An offshoot from the latter, known as Dhūndia, carries to an extreme the doctrine of the preservation of animal life, and worships *gurus* instead of idols. Of the 137,393 Jains enumerated in 1901, nearly sixty per cent. were Svetāambaras and twenty-two per cent. Dhūndias.

The Animists number 42,235 and are either Bhils or Girāsins; the majority live near and are in contact with the villagers of the plains, and their religion is hardly distinguishable from the lower forms of Hinduism.

The Christian community has remained practically stationary, having numbered 207 in 1881, 210 in 1891, and 224 in 1901. In the year last mentioned, 111 were Natives, 58 Europeans and 55 Eurasians, and of the Native Christians, forty-four were Presbyterians, twenty-eight Roman Catholics, and twenty-seven belonged to the Church of England. The United Free Church of Scotland Mission has had a branch at Jodhpur city since 1885, and maintains a small school for girls and a hospital. The State is included in the Anglican see of the Bishop of Nāgpur and the Roman Catholic Prefecture of Rājputāna; the latter was established in 1891-92, and is administered by the

Capuchin Fathers of Paris, the Prefect Apostolic having his headquarters at Agra.

At the last census more than 58½ per cent. of the people returned some form of agriculture as their principal means of subsistence; thus 52·6 per cent. were either landlords or tenants, 5·3 per cent. field-labourers, and about 0·3 per cent. growers of fruits and vegetables. In addition, more than 57,000 persons (or nearly three per cent.), who mentioned some other employment as the chief source of their livelihood, were also partially agriculturists; and a further 3·4 per cent., shown under the head of general labourers, were doubtless to some extent supported by work in the fields. The industrial population amounted to 17·71 per cent. and was engaged chiefly in the provision of food and drink (nearly five per cent.), and in the cotton and leather industries. The provision and care of animals gave employment to more than four per cent., personal and domestic service to 3·7 per cent., commerce to 3·2 per cent., and village service to nearly three per cent., while the professional classes, embracing religion, education, literature, law and medicine, as well as actors, singers and dancers, formed 1·52 per cent. Persons returned as having no occupation numbered more than 82,000, or over four per cent., and included people of independent means, pensioners, prisoners and beggars, chiefly the last.

Occupations.

Wheat is the staple food of the people in the eastern districts of Bāli, Bilāra, Desuri, Pāli and Sojat, and is consumed by the well-to-do in towns and villages elsewhere. In the Jodhpur district and in the southern and south-western *hukūmats* of Jālor, Jaswantpura, Sānchor and Siwāna, *bājra* is as common as wheat, while the people of Mārot, Nāwa, Parbatsar and Sāmbhar in the north-east habitually eat barley. In the rest of the territory, *jowār* and *bājra*, with *moth*, are the commonest food-stuffs; *bājra*, however, is more extensively consumed than any grain in the State. The use of maize is sometimes forced on the indebted agriculturist when his more valuable crops have passed into his creditor's hands, as is pathetically depicted by the proverb:—*kūrā karsā khāi, gehūn jīme* **Bāniā*, meaning "the coarse grain is consumed by the cultivator, while the Baniā takes the wheat." Neither rice nor meat are in general use as an article of diet, though most of the Rājputs and some of the other Hindus are meat-eaters when they can afford it. The flesh of the goat and wild pig is highly esteemed by Rajputs, while mutton and fowl are considered inferior both in flavour and nutriment. The principal vegetables are radishes and onions, the leaves and seeds of the *khejra* (*Prosopis spicigera*) being largely used as vegetable food in the western desert, and chillies are the chief condiment. In times of scarcity, many of the people subsist on the roots and seeds of grass, supplemented by locusts when they visit the country; locusts are reported to be both wholesome and palatable, when preserved by being salted. Watermelons are largely consumed, the pulp being eaten fresh and the seed dried, ground and mixed with flour for food.

Food.

* The local pronunciation of Baniā.

Tobacco and opium are in general use, as is liquor among many of the well-to-do; almost all classes keep cattle and goats to get a ready supply of milk.

The daily bill of fare of the ordinary individual is very simple and hardly ever varies. The following are some of the usual dishes:—*sogrā* or thick unleavened bread, baked rather hard; *rāb* or flour boiled down thin in diluted buttermilk, generally cooked in the evening and kept for use on the next morning; *khēcīh* or husked *bājra* mixed with *moth* in the proportion of about four to one, boiled down thick in water and sometimes improved by the addition of a little *ghī* or oil; *ghāt* or coarse ground flour boiled thick in water or buttermilk; and *daliā*, which is the same as *ghāt* but is boiled thin in water. *Sogrā* and *khēcīh* are described as fairly pleasing to the taste, but are not always within the means of the poorest classes. The commonest vegetables are the pods of the *kair*, *khejrā*, *phog* and other trees and shrubs, stocked for the year and often eaten raw, while almost the only relish used is a chutney of salt and chillies in the proportion of two to one.

The agricultural classes take four, and the artisans three meals a day. The early morning meal of the former consists of *ghāt* and either *rāb* or plain buttermilk—light refreshments which serve as a preparation for the day's work; about four hours later, the substantial breakfast is taken, *sogrā* taking the place of *ghāt*, and then follows another interval of four hours, spent in rest or sleep, especially in the hot weather; the lunch is a light affair, succeeded by hard work which whets the appetite for a hearty dinner at any time after sundown. These four repasts are respectively called *sirāwan* or *kalewā*, *rotī*, *dopahārā* and *biālu*. The artisan classes take their first meal in the morning, the second during the midday interval, and the last after sunset, *sogrā* or *khēcīh* forming an unfailing item of the menu.

The dress of an adult Hindu male consists of at least three articles, namely, a *dhotī* or loin-cloth about ten feet by three feet; a *bāndiā angarkhā* or full-sleeved, close-fitting but buttonless vest; and a *potiā* or covering for the head. It is optional to wear a sheet (*kheslā*) over the shoulders so as to serve as a wrap for the upper part of the body. With the well-to-do, the *dhotī* is usually the finished loom fabric, 5 by $1\frac{1}{2}$ yards and having a coloured border, but the writer and official classes affect the *chūdīdār pajāmā* (an imitation of the Lucknow style of the Muhammadan nether garment) when appearing in public, and the *bāndiā angarkhā* is discarded in favour of the *kurtā* or shirt (usually made of soft muslin and without collar or cuffs) and either an *achkan* or a *lambā angarkhā* (long coat); similarly the *potiā* is replaced by a turban which is either the *pechā*, *pāg* or *pagrī* (a strip of fine cloth, about eighteen yards long and barely nine inches broad, embroidered at both ends and tied round the head in various modes more or less peculiar to the different leading castes) or the *sāfā* or *phentā*, which is usually half a piece of mull. Of the various styles of head-gear in fashion, that known throughout Rājputāna as the Marwāri *pagrī* or *chonchdār pāg* (that is, the beaked

turban) deserves notice; its peculiarity is the separate tissue worn round it, which is either the plain *uparnī* or the laced *balabandī*. Of colours for turbans, red and yellow in all shades are marks of rejoicing, black and plain white are strictly a sign of mourning, and other colours, such as azure, green, etc., are used on any occasion indifferently. Among the higher castes, a *dupattā* or thin cotton sheet, carelessly gathered under the armpit or worn round the neck with the ends hanging down in front or round the waist so as to go under the seat when riding, takes the place of the *kheslā*, and the use of a cotton or woollen *rumāl* or kerchief, also round the neck or over the turban, is becoming fashionable. Two peculiar items of the wardrobe of the Rājputs and of a few others are the *jādiā* and the *mūchhpattī*. The former is the bandage with which the parted beard is held in position with the hairs pointing upwards along the sides of the face; its two ends are secured over the head-dress, the process being termed *bukānā bāndhnā*, but, though its utility in training the ornament of the face is unquestionable, it has to be untied when the wearer appears before superiors. The *mūchhpattī*, as its name implies, is designed with the object of training the moustache to twirl up, and is not worn out of doors.

The dress of the adult Hindu female consists of a *ghāgrā* or skirt, a *kānchlī* or half-sleeved bodice (made to cover only the breast and not the back, and kept in position by being tied up behind), and an *orkhī* or sheet or veil, about $2\frac{1}{2}$ by $1\frac{1}{2}$ yards taken over the head and round the body. There are two ways of wearing this garment. The lower classes, who have to earn their bread by manual labour, generally attach the two upper corners to the skirt-band, the right corner being sometimes taken round the waist, so as to serve as a sort of *kamar-band* in order that the arms may be free for work, and the portion over the head (called the *ghūnghat*) may be easily lowered over the face as a veil in the presence of strangers, superiors or elders. The higher classes, on the other hand, attach only the left corner of the *orkhī*, to the skirt-band in gathers, leaving the right free to be either doubled up on the shoulder when the arm is engaged or thrown loosely down the shoulder so that the *pallā* or portion in front may be quickly used as a veil, when all but the right eye of the lady would be concealed from view. Some castes, such as the Kāyasths and Oswāls, wear a white sheet called *thirmā* as an outermost garment when appearing in public, while others use a woollen wrap (called *lūnkār* and usually red in colour, especially in the cold weather. With the higher castes, the use, in addition to the skirt, of a *phetiā*, or piece of cloth about a yard or so in width but of the same length as the skirt, is obligatory to signify the married state; it must be of a different colour from the *ghāgrā*, but is put on only when going out-of-doors.

Among the Musalmān males, the articles of dress are much the same as those of the well-to-do among the Hindus except that the use of the *chūdīdār pajāmā* is more common at the capital and in a few of the larger towns than in small towns and villages, and that a

rumāl is almost always worn over the *pagrī* or *sāfā* when appearing in public. Moreover, the place of the *kheslā* or *duputtā* is taken by a *chaddar* or sheet generally of a check pattern; the coat is buttoned to the left instead of to the right, as in the case of Hindus and Europeans; and the *dhotī* is doubled-up before use and therefore worn only by the half length, with a knot in the front so as to leave the upper corners free to be taken between the thighs and fixed at the back.

The Musalmān females wear *paijāmās*, a long *kurtā*—usually half-sleeved—an *orhnā*, and, when going out-of-doors, a *tilak* which resembles a flowing gown, being gathered up at the waist in innumerable tucks, but is put on like a coat as it is open in front and has close-fitting sleeves.

No account of the dresses of Mārwar would be complete without mention of that very useful article of apparel known as Jodhpur breeches. They are believed to have been invented about twenty years ago, and are a sort of combination of riding breeches and military overalls but tighter from the knee downwards than the latter are and not strapped at the foot; they are worn by many of the chiefs, nobles and officials of Rājputāna, and by British officers and others.

It is only at the capital and in the more important towns that substantial structures, called ~~houses~~ *havelis* and built almost exclusively of sandstone and mortar, are found. In the smaller towns and villages, the houses, with the exception of the residences of the Thākur and perhaps a few Mahājans, are mere huts. In the more prosperous districts, where wood for timber—particularly *babūl* and *khejra*—is not scarce and the soil is clayey, the huts are of two kinds, *ghar* or *padwā*. The former have mud walls and flat mud roofs supported on wooden beams; the latter have walls of sun-burnt bricks and are covered with rude ill-baked tiles on sloping roofs—those with a shed roof being known as *ekdhāliā*, and those with a gabled roof as *dudhāliā*. In the arid and sandy tracts, the poorer people have to be content with *jhonprās* which are thatched with a combination of the wild *ākra* shrub, rushes, reeds, and grasses. The agricultural classes divide their residence between the huts in the village and the *dhonis* or cottage-farms, which are usually circular in shape with conical roofs of thatch. The Jāts and Bishnois seem to have a special preference for these *dhonis*, as they live mostly in their fields.

Hindus cremate their dead as a rule, but ascetics like the Gosains and Sanyāsīs, as well as Jasnāthīs, Bishnois, worshippers of Rāmdeoījī, and sometimes Mālis who die unmarried are buried. The Musalmāns always practise inhumation and erect memorial-stones or buildings; while the Bhils almost invariably burn their dead, burying only infants and the first victim of an outbreak of smallpox.

The amusements of the people generally are few and simple. For the younger generation there are games resembling hockey, prisoners' base, tip-cat, hide-and-seek, blindman's buff, etc., while kite-flying is indulged in by both children and adults. Other amusements are dancing parties, musical entertainments, cards, &c.

and a game rather like draughts or fox and geese. Riding exercise is taken by almost every one who can afford to keep a horse, and the Rāthor, whether born in the palace or the village, is an accomplished equestrian. Polo is much played at the capital, and some of the finest exponents in India hail from Jodhpur; other recreations of the wealthier Rājputs are pigsticking and big game shooting.

The principal Hindu festivals observed are the Holi in Phāgan (February-March), the Sil sātami (in honour of Sita the protectress of infants) and the Gangor (sacred to Gauri or Pārbati, the goddess of abundance), in Chait (March-April); the Akhā Tij in Baisākh (April-May) after the reaping of the wheat crop; the Rākhi in Sāwan (July-August), when coloured cotton cords are tied round the right wrists as charms; the Tij in Bhādon (August-September) being the anniversary of the day on which Pārbati was, after long austerities, reunited to Siva; the Dasahra in Asoj (September-October), in commemoration of the victory of Rāma, king of Ajothhyā, over Rāvana, the demon or aboriginal monarch of Lankā (Ceylon); and the Dewālī or festival of lamps in Kārtik (October-November). The birthday (*sālgirah* or *bavargānth*) of the Mahārājā—in the present case Māh sudi 1st, i.e. in January or February—is also an occasion of much display and rejoicing at the capital. The Muhamadinan festivals are the same as elsewhere, namely the Mubarram, the Id-ul-Fitr and the Id-uz-Zuha.

Festivals.

Among the higher and middle classes of the Hindus, the names always consist of two parts, whereas the lower castes usually have but one name which, as pronounced, not infrequently ends in the letter "o." Where there are two names, the first will be that of some god or goddess (e.g. Bhangwān, Lachhman, Rām, Gauri or Devi), or ferocious animal (Kesri, Nāhar, Sher), or jewel (Jawāhir, Lāl, Moti), or of the day of the week on which the child was born (Mangal); or it may be suggestive of auspiciousness or power, physical or political, such as Bakht, Bijai, Fateh, Jai, Abhai, Takht, etc. The second name, on the other hand, is usually indicative of the division to which the person belongs: thus Dās, Datt, Deo, Prasād among Brāhmins; Singh among Rājputs, though this is also the second name of some of the Purohits and of one family in the *mutasaddi* or official section of the Oswāls; and Chand, Rāj and Mal among Mahājans. Of the numerous Sūdra castes, the Mālis and Sonārs alone show a preference for double names, combinations of Rām being most popular, such as Rām Bha-jan; Rām Pratāp, Siva Rām and Ganga Rām. A few typical names of the others will suffice. Rāwatio and Parbudo (Jāt); Lachhmann, Girdhāri and Kālū (Bishnoi); Hema, Kalla and Rūpla (Sīrvi); Kānho, Bādlo and Piro (Rebāri); Shobhilo, Dhanno and Gainio (Kumbār); Gumānio, Bherio and Binjio (Bala); Padmio, Bālio and Khetio (Bhil); and Motia, Pālia and Kūmpla (Minā). The preponderating use of the final "o" among these lower classes is ascribable to the ease it gives in the utterance of the name as a vocative.

Nomenclature.

In the matter of titles, the Srimālis and the Dāima section of the Chenniyāt Brāhmins place the term "Pandit" before, and "Sharma"

There being no such thing as ejectment, the most the decree-holder can do is to seize the standing crop after leaving something for the maintenance of the cultivator, as the proverb says:—*Pakhile pet ne pāchhle Seth*—meaning “subsistence” (literally, the stomach) “first, and then the banker.”

The main wealth of the desert lands consists of the vast herds of camels, cattle and sheep which roam over its sandy wastes and thrive admirably in the dry climate. The camel is a particularly useful animal, being ridden and driven, used as a beast of burden and employed in agriculture. The Mārṡwār camels are larger and stronger than those of Jaisalmer, and are more enduring than, but on the whole not so speedy as, those of Bikaner. The best riding camels come from Sheo in the west and are known as Rāma Thalia; they are said to be able to cover eighty or even one hundred miles in a night without difficulty. Māllani, Phalodi, Sānkra and Shergarh also supply good riding camels, the price of which ranges from Rs. 150 to Rs. 300, but they are inferior to the Rāma Thalia breed. The ordinary draught-camel can be bought for about Rs. 80, but the female (*sānd*) is usually kept for breeding purposes, and its milk is used by Rāikās and other menial classes. Horned cattle are reared in such numbers that they supply the neighbouring States and Provinces; they are almost wild and in excellent condition, but, when taken out of the country, languish and get thin unless supplied with grain and condiments to make up for the loss of the rich grasses on which they have been accustomed to feed. The districts of Māllani and Sānchor are remarkable for their breed of milch cows which, when well taken care of, give from five to ten seers of milk at a time; prices range from Rs. 40 to Rs. 200. The best calves are usually purchased when some six months old for about Rs. 60 by the cultivators of Nāgaur, who are very skilful in bringing them up; they are carefully looked after for two or three years and then sold. The bullocks of Nāgaur are famous throughout northern India and are sold at all the principal fairs; a good pair will sometimes fetch more than Rs. 300, but the average price is Rs. 150. They are noticeable for their massive humps and long horns, and are very suitable for drawing the vehicles known as *rathis* or *bailis*; they require cleanliness and good feeding, and must be carefully tended when away from their native pastures. In Māllani, especially in two villages (Gūrha and Nagar), the Thākurs breed horses which are noted for their hardiness and ease of pace; they grow to a good height and, though light-boned, will carry heavy weights, and cover long distances without food or water. They sell for from Rs. 200 to as much as Rs. 800 or even Rs. 1,000. Sheep and goats are found everywhere, and are largely purchased by Muhammadan butchers from Gujarāt, but only male goats are sold. The sheep, though small, fatten well and, if properly fed, yield mutton second to none.

In ordinary years, grass is abundant in all parts of the State, but when the rains fail, the people, especially those living in the western half, have to migrate with their cattle to Mālṡwā, Sind, the United

Provinces, or other places where good pasturage is to be found. Although the forests are thrown open to grazing in times of famine, they are situated almost entirely along the eastern frontier, the difficulty of transporting fodder is often insuperable, and the number of cattle which can be admitted is limited. Camels and goats, which subsist largely on thorny bushes, are, however, easily maintained, even in years of drought.

Two great fairs are held in Mārwar, one at Parbatsar and the other at Tilwāra. The former, known as the Tejājī-kā-melā, takes place in Bhādon (August-September) and lasts for ten days; it is attended by some 10,000 people, and bullocks and donkeys are sold in large numbers. Tilwāra is a village near Bālotra, and the fair held there in March is often called the Chaitri after the month of Chait (March-April); many bullocks, calves, camels and horses change hands, and the attendance is usually larger than at Parbatsar. Small local fairs are held all over the country, notably at Mūndwa in the Nāgaur district, and many of the cattle, camels and horses are taken to the well-known gathering at Pushkar near Ajmer.

Fairs.

The prevalent cattle diseases are pleuro-pneumonia (*motā rog*), rinderpest (*mātā*) and foot-and-mouth disease; the last is called *muāro* in the initial stage, lasting for about three days during which a whitish mucus is discharged from the mouth, and *khurāro* in the final stage when the hoof begins to rot. It is not so fatal in the semi-desert regions as in the north-western districts; various native remedies are used, several of which are of little value, but segregation is seldom attempted, and the cultivators generally say that it is impracticable. The dangerous diseases from which camels suffer are locally called *kālīa bao* and *tibarsā*. An animal attacked by the former is said to shiver, fall down and expire; the only treatment is to slit the ears, and, if blood exudes, the beast is safe, whereas, if no blood issues, a fatal ending is certain. *Tibarsā* is described as a sort of remittent fever, lasting sometimes for three years; the patient avoids sitting in the moonlight, seeks shade, and gradually wastes away. The diseases of the buffalo are *jhenjā*, a skin disease disappearing in three days if promptly attended to, and *chiri*, an affection of the lungs, causing the animal to run at the mouth and refuse food, and terminating fatally within twelve hours if proper remedies are not applied. Goats suffer from (i) *galtīya*, a disease of the throat, which can be cured by lancing the affected part where a poisonous fluid has collected; (ii) *burkiyā*, when the animal turns round and round, falls and expires, and for which there is no known remedy; (iii) *pephūria*, an affection of the lungs; and (iv) *mātā*, or rinderpest, which is very fatal when it appears and usually carries off more than half of the flock.

Diseases of cattle, camels, etc.

Irrigation is practised in three different ways, namely from wells (*chāhi*), by canals from large tanks (*nahri*) and by inundation (*sailābi*.) A reference to Table No. XXI in Vol. III-B. will show that, in that portion of *khālśa* territory for which returns exist, the irrigated area fell from 202 square miles in 1898-99 to 33 in 1899-1900 and has

Irrigation.

since averaged 100 square miles annually, or about one-ninth of the average net area under crop.

The chief sources of irrigation are the wells which are said to number 54,542; of these, 40,646 contain sweet, and the rest brackish water. Further, 34,050 are *pakkā* or masonry and 20,492 are *kachchā* or unlined, and of the total number of wells, 7,520 are situated in *khālsa* villages. The number of the latter actually worked during 1905-06 was 4,198 (3,098 sweet and 1,100 saline), and the area irrigated therefrom was about 29,225 acres. The cost of a *pakkā* well varies from Rs. 250 to Rs. 1,000 according to size and depth, while that of a *kachchā* one, which will last for many years, is Rs. 200 or Rs. 300; the shallow pits dug along the banks of rivers cost from ten to twenty rupees each. Different water-lifts are used for different depths. Thus, when the water is about four feet from the surface, it is raised by means of an *odia* or bamboo basket, covered with leather and having a rope attached to either side; and when the depth is about nine feet, a contrivance called *chānch* or *dhenkī* is used, consisting of a wooden beam balanced on a vertical post, and having a heavy weight at one end and a small leathern bucket or earthen jar at the other. Another species of lift employed when the depth is about fifteen feet is the *pag pāvti* or miniature Persian wheel which, as its name implies, is worked by the feet. For lifts of over fifteen feet bullock-power is almost invariably employed, the most common contrivance being the *jhelwā* or *charas*, a large leathern bag fastened to one end of a rope which passes over a pulley overhanging the well. When the bag has been lowered, the other end of the rope is attached to a pair of bullocks who then walk down a ramp of a length approximately equal to the depth of the well. When the bullocks arrive at the end of the ramp, the bag has been drawn up to the top of the well and its contents are emptied into a trough, generally by a man who stands by, but sometimes by a self-acting mechanical arrangement, called *sūndia*. When the ordinary *jhelwā* is used, the services of five men are needed, namely two drivers, called *kīliyā* from the peg (*kīli*) which fastens the rope (*lāo*) to the yoke, two to catch and empty the bag (working half a day each as the labour is severe), and one, styled *pāntiyā*, to look after the channels and distribute the water over the field. There should also be four pairs of oxen, two working at the same time, *viz.* one coming up and the other going down the ramp, with a relief about noon. The well is worked from dawn till sunset, with a rest of three hours in the hot weather, and a pair of bullocks should draw in a day sufficient water to irrigate from one to three *bighas** according to the depth of the well. The alternative to the *jhelwā* is the Persian wheel (*arath*) which is used chiefly in the south-eastern districts. It consists of a large number of water-pots passing over a vertical wheel erected over the top of the well, and rotated by means of rough wooden gearing which is worked by a pair of bullocks walking round a circular track. The labour is much lighter than in

* $2\frac{1}{2}$ *bighas* are equal to one acre.

the other process, as the driver sits on the beam to which the yoke is attached and needs no assistance; the well, moreover, can be worked at night if it holds enough water and bullocks are available.

Tanks.

The State possesses altogether thirty-five tanks used for irrigation purposes, and twenty-four of them are situated in *khālsa* villages. The three largest, namely the Jaswant Sāgar, the Sardār Samand and the Edward Samand, have already been briefly described in Chapter I, Part II of this volume, and they can, when full, irrigate 20,000, 18,000, and 6,000 acres respectively. Others deserving of mention are those at Chopra, Jograwās, Khārda and Sādri; the rest are small and are useful only as producing crops of wheat in their beds. The total *khālsa* area irrigated from tanks during 1905-06 was about 3,553 acres, namely 3,103 acres by means of canals and other distributaries, and 450 in the beds themselves. A good deal has been done during the last seventeen years in constructing storage reservoirs of all sizes at a cost exceeding twenty-seven lakhs of rupees, and the subject has been receiving increased attention since the appointment of the Irrigation Commission in 1901 and of a Consulting Engineer for Irrigation in Rājputāna in 1902.

CHAPTER V.

RENTS, WAGES AND PRICES

Rents in the proper sense of the term are found only in that portion of the State which is held on certain conditions by individuals such as *jāgīrdārs*, *ināmdārs*, etc., or which has been granted in charity to Brāhmans and Chārāns, or to temples. They are collected mostly in kind, the landlord taking from the cultivator a share of the produce varying from one-sixth to one-half according to the kind of crop grown and the caste of the peasant. The system is, however, losing ground in the public estimation, and produce rents are almost everywhere being replaced by payments in cash. In the *khālśa* area, rents are quite unknown. The Darbār deals directly with the cultivator, and is both landlord and proprietor. The revenue system is *ryotwāri*, and the State demand, which fluctuates with the out-turn of the year, has since 1894 been collected wholly in cash at rates varying from $1\frac{1}{4}$ annas to Rs. 10 per acre, though, where fruit-trees are grown, as in the suburbs, the rate is sometimes as high as Rs. 35 per acre.

Wages vary considerably in different localities, and depend mainly on the demand and supply of labour; they are said to have increased considerably during the last twenty years, especially those of blacksmiths, dyers, goldsmiths and the ordinary landless day-labourers. In Table No. XXIII in Vol. III-B. an attempt is made to give the average daily wages of skilled and unskilled labour at certain important centres at the present time, but for unskilled labour the daily rate is not an accurate guide to the monthly or annual rate, since employment is not constant. The table shows that the blacksmith, carpenter and weaver each earn from four to eight annas a day, the mason, stone-dresser and tailor from four to six, the painter from four to five, the dyer from three to ten, and the goldsmith from six to twelve. Turning to unskilled labour, it will be seen that a camel or bullock-cart with an attendant or driver can be hired for six annas a day at Merta and for from eight to twelve annas at the other places, while the daily wage of the coolie varies from two to four annas, and of the waterman or *bhisti* from two to as much as eight. It is reported that during the last twenty years the daily earnings of blacksmiths, brasiers, carpenters, dyers and goldsmiths have increased by two or three annas, and of tailors and day-labourers by one or two annas; while cartmen, camelmen and weavers generally receive two or three annas less than they used to.

In the districts, wages for agricultural labour are mostly paid in kind and are not infrequently supplemented by gifts of clothes or other small perquisites. The village artisans and servants, such as blacksmiths, carpenters, potters, workers in leather, barbers and washermen are almost always remunerated in kind at the time of harvest.

Continuous records of prices are available from 1873, and Table No. XXIV in Vol. III-B., which has been compiled from the official publication entitled *Prices and Wages in India*, shows for the State as a whole the average retail prices of the four principal food grains and of gram and salt during the periods 1873—80, 1881—90, 1891—1900 (excluding famine years), and in each subsequent year. The price of salt is of course regulated by the varying rate of duty and the cost of transport, and has ranged from more than 54 seers per rupee in 1876 to 12½ seers in 1894, the present price being about 16½ seers. The lowest average prices of food grains recorded during the last twenty-three years have been (in seers per rupee):—wheat 18·14 in 1885; and barley 26·7, *bājra* 24·95, and *jowār* 27·9, all in 1876; while the highest have been:—wheat 8·87 and *jowār* 9·54 in 1897, and barley 11·57 and *bājra* 10·14 in 1900. From an examination of the figures in the publication above mentioned it would seem that a general rise occurred during the latter half of the decade ending 1890. Thus, whereas the prices of wheat, barley, *bājra* and *jowār* were respectively 18, 24, 21 and 23 seers per rupee in 1885 or 1886, they have since averaged 12, 17, 15 and about 16 seers, and in this calculation years of famine have been left out of account.

A more remarkable feature has been the equalisation of prices, largely due to improved communications, especially railways. In the acute famine of 1868-69, when there were no metalled roads and no railway, wheat at one time sold for 3½ seers for the rupee, whereas in 1899-1900, when a similar calamity befell the country, the railways poured in enormous supplies of grain from without, and the highest quotations were:—wheat nearly seven, and *bājra* and *jowār* more than eight seers.

Table No. XXV shows the average monthly prices of food grains at the capital during the last ten years, excluding 1899-1900 and 1900-01. In the State as a whole, grain is cheapest for a month or so after the harvests, when the producer is forcing the sale in order to secure the means wherewith to pay his revenue as well as some portion of his debt to the village banker, and it generally becomes dearer the further one advances from this period.

The material condition of the urban population is on the whole satisfactory, and the standard of living is considerably higher than it was fifty years ago; the agricultural population, on the other hand, has become impoverished from bad seasons, and where there has not been a perceptible falling-off, there has at any rate been little or no progress. The style of living of the middle-class clerk, the landless day-labourer and the ordinary cultivator in former days and at the present time may be briefly noticed.

Material
condition
of the people.

The clerk has certainly improved in every way. In place of the scanty, coarse and clumsy clothes which characterised his predecessor even in his own earlier years, he has adopted a style of dress which is both costly and superior. The fine Manchester-made cloth has superseded the local *rezā*, and the *dhotī* has made way for a pair of trousers; his children and female belongings are better dressed;

and on occasions of marriages and festivals there is often quite a display of glittering finery in clothes and ornaments. An improvement in the design, construction and furniture of his habitation is also noticeable. The *kachehā* or humble thatched dwelling has been replaced by a *pakkā* house, the floors and walls of which are plastered instead of being occasionally coated with cow dung; the rooms are larger, loftier and better ventilated, and latrines, formerly conspicuous by their absence, now form part of almost every building. The bare floors are often covered with cheap carpets or rugs, and the furniture includes a few stools, chairs, a table and some bedsteads. Metal cooking utensils have taken the place of earthen pots, and the food is generally of a better class—rice and wheat instead of *bājra* and *moth*. The smoking of foreign cigarettes and the chewing of betel-leaves, formerly regarded as veritable luxuries, is common, and there is hardly a clerk who has not got his *chākar* or servant, while some also keep a female domestic (*deorī*).

The landless day-labourer, in his Protean forms as a porter at the railway station, as a mill-hand, as a household servant, as a water-carrier, etc., has also made great strides. He has discarded the rude surroundings of his village and has plunged headlong into a city life, where his services are in considerable demand and he earns much higher wages than he used to. Lastly, there is the cultivator, a stationary being from whom the spirit of the times and the genius of modern civilisation evoke no sympathetic response. He has shown no preference for new implements of agriculture, but plods along as best he can with his antiquated tools. He is generally in debt, and his style of living, as regards dress, food, house and furniture, is much the same as it was twenty years ago.

CHAPTER VI.

FORESTS AND MINERALS.

The forests of Mār wār occupy nearly 345½ square miles and are found mostly on the western slopes of the Arāvallis in the districts of Bāli, Desuri, Parbatsar and Sojat, and in Siwāna. Of the above area, 275·11 square miles are the property of the Darbār and the rest (70·37 square miles) belong to certain *jāgīrdārs*, but the entire tract is under State management.

FORESTS.
Area and
position.

The prevailing rock is granite with which are associated schists and other metamorphic formations, and the result is a poor soil which, coupled with a scanty rainfall, permits of the growth of deciduous trees only. There are three zones of vegetation. On the higher slopes are found *sālar* (*Boswellia thurifera*), *gol* (*Odina Wodier*), *karāyia* (*Sterculia urens*) and *golia dhao* (*Anogeissus latifolia*); below these come *dhao* (*Anogeissus pendula*) and *sālar*, while hugging the valleys and at the foot of the slopes are *dhāk* (*Butea frondosa*), *ber* (*Zizyphus jujuba*), *khair* (*Acacia catechu*), *dhāman* (*Grewia oppositifolia*) and sometimes *dhao*. The last named and *khair* are the principal timber trees, being both superior in quality to and more numerous than the other varieties. *Timru* or ebony (*Diospyros tomentosa*) is found sparingly, and *babul* (*Acacia arabica*) is rather a tree of the plains. The minor products include bamboos, grass, honey, wax, gum, and certain tubers (called *safed mūli* and *satāwar*) of the asparagus species.

Soil and
forest
growth.

The question of forest conservancy was first taken up in 1884 when a special officer was deputed from Ajmer to examine the wooded tracts on the eastern frontier, and on his recommendation the Darbār applied for the services of a qualified ranger from the Punjab who joined in the following year. It was found that practically the entire forest area belonged to *jāgīrdārs*, and negotiations were accordingly started with the latter with the result that in the course of two years the greater part of it was acquired by the State, either by paying compensation to the owners or by giving them other land in exchange. Thus, though the department came into existence in 1888, the work of conservancy began in 1890, and it was not until 1894 that the last Thākūr agreed to place his forests under the management of the Darbār. At first the people did not take kindly to the scheme which necessarily subjected them to some, although very mild, restrictions, but the opposition has now entirely disappeared and the relations between the forest staff and the populace are sufficiently harmonious. The villages in the vicinity are, in consideration of their respective rights and privileges, divided into four classes; the inhabitants of the first group, who live actually within the forest area, get all kinds of produce free, those of

Highway.

the second and third groups get certain articles free and others at reduced rates, while those of the fourth class pay ordinary fees.

For administrative purposes the forests are divided into four ranges, and the staff at present employed consists of a Superintendent, four rangers, six foresters, one hundred guards, and a small clerical establishment, costing altogether about Rs. 10,000 yearly. The entire area has been demarcated, most of the cultivated fields having been excluded, and is protected by means of fire-lines cut on every side. A special establishment of fire-watchers is employed during the hot months, and these measures have on the whole been successful, though the neighbouring State of Udaipur does not co-operate properly. A survey on a scale of four inches to the mile was started in 1902, and 203 square miles have since been surveyed and mapped at an average cost of Rs. 33-4 per square mile.

The forests are entirely closed to camels, sheep and goats, but horned cattle are admitted except during the rains. It was at one time feared that they could not be utilised for grazing purposes because there were very few places where water was available, but this drawback has lately been removed by digging tanks at various spots. In times of famine, cattle are allowed to graze throughout the year, and the people are permitted to cut grass and fodder and gather tubers, fruits, flowers, etc. free of charge; these concessions were much appreciated in 1899-1900.

The out-turn during the year 1905-06 was 51,814 cubic feet of timber, 970,398 cubic feet of fuel, 219,771 bamboo stems and about 4,458 tons of grass. The average revenue for the ten years ending March 1900 was Rs. 20,783 and the expenditure Rs. 16,598, or an average surplus of Rs. 4,185 per annum; the net revenue has since been:—Rs. 376 in 1900-01, a year of drought and sickness; Rs. 4,043 in 1901-02; Rs. 5,709 in 1902-03; Rs. 6,544 in 1903-04; and Rs. 12,003 in 1904-05. The actual receipts in 1905-06 were Rs. 48,204 and the disbursements Rs. 37,734, or a surplus of Rs. 10,470. These figures relate only to forests which are the property of the Darbār; those which still belong to *jāgīrdārs* but are worked by the department generally yield a net revenue of about Rs. 2,000.

In addition to the forests, the department looks after certain fuel and fodder reserves situated in *khālsa* villages and occupying an area of twenty square miles. They were started in 1895 on the lines recommended by Dr. Voelcker and are gradually being extended. During the last ten years, two opportunities of testing their utility have occurred, and they were found to appreciably answer their purpose. The expenditure to the end of March 1901 was about Rs. 4,500 and has since averaged Rs. 760 yearly.

Salt, marble and sandstone excepted, very few minerals of value have so far been met with, though, judging from the nature of the rocks, it is possible that the country is capable of yielding gold, silver and copper ores, and coal. According to tradition, gold was formerly obtained in Jālor and zinc near Sojat, and lead and copper mines are said to have been worked in the district last mentioned as well as

in several others, notably on the Pūnagarh hill near Pāli. The minerals of secondary importance comprise gypsum and selenite, fullers' earth, mica, asbestos, hematite and other iron ores, granite, calcite or Iceland spar, serpentine, talc and steatite.

Salt, chiefly in the form of sodium chloride associated with sodium sulphate and sodium carbonate, is found in great abundance at several places, such as the lakes at Didwāna, Pachbhadra and Sāmbhar, the depressions at Phalodi and Pokaran, the *jhils* at Kuchāwan and Sargot, and along the Lūni river. Under the treaties of 1870 and the agreement of 1879, the manufacture of salt is practically a monopoly of the Government of India and for the last fourteen years or so has been carried on only at Didwāna, Pachbhadra and Sāmbhar. Details regarding the methods of manufacture, the quantity produced, the cost of extraction, etc. will be found in the separate articles on these places in Chapter XXII below, and it will suffice here to state that the annual out-turn during the last ten years has averaged 165,740 tons worth about 9.55 lakhs, the yearly sales have been nearly 183,000 tons, and the annual net revenue derived by Government approximately 93 lakhs or, say, £620,000. Under the fourteenth article of the agreement of 1879, the manufacture by the Darbār of *khāri* or earth-salt for industrial purposes is permitted at certain petty works in two villages near Bilāra, but the out-turn in any one year is not to exceed 20,000 maunds (about 732 tons). During the last five years, the amount manufactured has averaged only 4,359 maunds annually.

Next in importance to salt comes marble, quarried mostly at Makrāna (twelve miles from the Sāmbhar Lake) but to a small extent at various places in the Arāvalli hills, such as Sonāna near Desuri in the south-east. The Makrāna marble is fine-grained and white, and has been celebrated for centuries; it was used in the construction of the Taj Mahal at Agra. The twenty-six quarries at present being worked give employment to about 110 labourers, chiefly of the Silāwat caste of the local Muhammadans, and the average yearly out-turn is about 1,000 tons as compared with 300 tons ten years ago. The royalty paid to the Darbār at the rate of eight annas per maund of fine marble and two annas per maund of grey marble varies from Rs. 16,000 to Rs. 20,000, and in 1905-06 (when the out-turn was 1,540 tons) amounted to Rs. 22,256. The Sonāna variety is inferior, being neither so fine in grain nor so white in colour, and the demand for it is purely local. Two quarries are worked, but no record is kept of the output.

Marble.

Sandstone is plentiful in many parts, being found at Bārmer, Jodhpur city, Khātū (in Nāgaūr), Sojat, Tivri (in the Jodhpur district), etc. It is both fine and coarse-grained, and varies in colour from deep red at Tivri and brown and pink at the capital to yellow at Khātū; it is quarried in blocks, large and small, takes a fine polish, and is eminently suitable for carving and latticework. It has been used locally for building purposes for ages, but very little was exported till 1902 when a demand for it arose in Sind. There are more than 140

Sandstone.

quarries at Jodhpur itself, and they give daily employment to about five hundred men drawn chiefly from the Māli community of the Hindus and the Muhammadan class of Silāwats. The yearly out-turn of sandstone in the entire State is about six or seven thousand tons, and the income derived by the Darbār from a nominal fee of one pice per camel-load averages about Rs. 2,000 annually.

Gypsum (or *khādi*, as it is locally called) is found in considerable abundance in the Nāgaūr district and in small quantities in Phalodi and Bārmer. It is used as cement to fill the joints in stone-masonry, and at Nāgaūr and in its vicinity, where it is both cheap and plentiful, it almost replaces lime as a cementing material; its use is, however, confined to the interior of houses as it will not stand heavy rain. The process of quarrying is very simple; the workmen go down the slanting pits, dig out the mineral and bring it in baskets to the surface. About thirty men, mostly of the Beldār caste, are thus employed daily, and the yearly output averages between five and six thousand tons. Selenite crystals of similar origin to gypsum have been found recently in the *kankar* near the base of the silt in the Sāmbhar lake, and are said to be plentiful in Pachbhādra and near Khinwal in the south-east.

Beds of fullers' earth (called *mitti* or *Mullāni mitti*) exist in the Phalodi district and the vicinity of Bārmer, usually from five to eight feet below the surface. The clay is quarried in the ordinary way and is exported chiefly to the Deccan, Gujarāt and northern India, where it is often used for the manufacture of the better grades of pottery; locally, however, it is popular as a hair wash in virtue of its grease-absorbing properties.

The remaining minerals need no lengthy notice. Granite abounds in the Arāvallis and the Jālor and Siwāna hills, but very little use is made of it; and serpentine exists at Ghānerao in the south-east and in the Parbatsar district in the north-east. Among more or less recent discoveries are veins of mica and asbestos in the Arāvalli hills in association with schists and porphyritic granites; fairly rich ores of iron in the Chappan-kū-pahūr near Siwāna; crystals of calcite or Iceland spar near Sādri in the Desuri district, which were described as being too opaque to be of any value; talc near the village of Barr in Jaitāran; and steatite or soapstone in Parbatsar. No attempt has yet been made to work any of the above.

CHAPTER VII.

ARTS AND MANUFACTURES; COMMERCE AND TRADE.

ARTS AND
MANUFAC-
TURES.

The organisation of Hindu society demands that certain necessary arts, such as those of the weaver, the potter, the oil-presser, the blacksmith, and the shoemaker, shall be practised in every village, but they are all rude handicrafts carried on with only a few tools of the most primitive type. The vast bulk of the population (nearly sixty-three per cent.) is supported by pasture and agriculture, and the non-agricultural element of the village community is insignificant, being as small as is consistent with the few and simple needs of the average cultivator; indeed, it exists for his benefit and is directly maintained from the produce of the village fields, so that all stand or fall alike with the harvest. Such petty village manufactures as exist are strangled or elbowed out by foreign competition, and the people are driven to an almost absolute dependence on the soil which cannot be adequately expressed in figures.

Weaving is an important branch of the ordinary village industry, but beyond coarse cotton and woollen cloths, mostly made of locally produced fibre, hardly anything is attempted and factory life may be said to be non-existent; work in leather is also the occupation of a large class of people represented in every village, but it is of a rude kind. The dyeing and printing of cotton fabrics constitutes a highly specialised industry, and the dyers and printers still thrive in consequence of their ability to gratify the love of colour, or rather the well-designed combination of colours, so popular among either sex in Rājputāna. Other more or less important but struggling industries are represented by the brass and iron-founders of Jodhpur and Nāgaur, the goldsmiths, silversmiths and embroiderers of Nāgaur, the lacquerers of Bagri (in Sojat) and of Jodhpur and Nāgaur, and the ivory turners of Merta and Pāli. Turbans for men and scarves for women are dyed and prepared with much labour by Chadwās and Khattris, and an embroidered silk knotted thread for wearing on the turban (called *phūlmāla*) is also peculiar to Mārwar and is made by Oswāl Mahājans, those engaged in the work being styled Patwās (from *pat*, meaning silk). The *jamdānis* or leathern boxes of Jodhpur, the guitar strings of Nāgaur, the felt cloaks and rugs and the *khaskhas* fans of Merta, the drinking-vessels of bell-metal of Jālor, the marble toys, cups and platters of Makrāna, the saddles and bridles of Sojat, and the millstones and camel-trappings of Bārmer are all noteworthy.

in 1897 at a capital cost of more than a lakh was always an unprofitable concern and was closed as a State institution in 1904, while the flour-mill erected at the capital in 1899 has been almost equally unsuccessful. There are five wool and cotton-presses in the State, namely two at Pāli and one each at Jodhpur, Lūni Junction and Merta Road, but they belong to private individuals, and nothing is known about their out-turn or working.

The trade of Mārwar in olden days was considerable, the State forming the connecting link between the sea-coast and northern India. The chief mart was Pāli, where the productions of India, Kasbmīr and China were exchanged for those of Europe, Africa, Persia and Arabia. Caravans from the ports of Cutch and Gujarāt brought ivory, copper, dates, gum arabic, borax, cocoanuts, broadcloths, silks, sandal-wood, camphor, dyes, drugs, spices, coffee, etc., and took away chintzes, dried fruits, cumin-seed, assafoetida, sugar, opium, silks, muslins, shawls, dyed blankets, arms, potash and salt. The guardians of the merchandise were almost invariably Chārans, and the most desperate outlaw seldom dared to commit any outrage on caravans under the safeguard of these men, the bards of the Rājputs. If not strong enough to defend their convoy with sword and shield, they would threaten to kill themselves and would proceed by degrees from a mere gash in the flesh to a death-wound; or if one victim was insufficient, a number of women and children would be sacrificed, and the marauders declared responsible for their blood. Colonel Tod wrote thus about 1830:—"Commerce has been almost extinguished within these last twenty years, and, paradoxical as it may appear, there was tenfold more activity and enterprise in the midst of that predatory warfare, which rendered India one wide arena of conflict, than in these days of universal pacification. The torpedo touch of monopoly has had more effect on the caravans than the spear of the desert Sahrai or outlawed Rājput; against its benumbing qualities the Chāran's dagger would fall innocuous; it sheds no blood, but it dries up its channels." In giving the yearly revenue from customs-duties as Rs. 4,30,000, Tod observed that the figure was taken from ancient records and represented the sum realised in the "good old times" rather than that collected in his day, which was considerably less.

Up to 1882 trade was much hampered by the system of levying transit-duty and various vexatious cesses such as *rāhdāri*, *māpa*, *dalālī*, *chungī*, *tolai*, etc., and the average annual income from these sources and from import and export-duties amounted at that time to Rs. 4,61,000. In 1882-83 the Customs department was reorganised and a universal tariff, based on the principle of reducing duty on necessities and enhancing it on luxuries, was introduced; moreover, all the harassing imposts enumerated above were swept away except import, export and transit-duties, and of these, the last were entirely abolished in 1891 save on opium and intoxicating drugs. Since 1883 the tariff has been revised from time to time with the object not only of increasing the revenue but of giving every possible impetus to trade and convenience to the public. The result has been that during the last

city years the annual receipts have averaged about eleven lakhs; the actual figures for 1905-06 were:—receipts Rs. 10,42,714; expenditure Rs. 1,43,243; and net revenue Rs. 8,99,471.

The trade is at present mostly made up of the export of animals, cotton, hides, oil-seeds, wool, bones, salt, marble, sandstone and millstones, and the import of sugar, opium, *gur*, rice, dry fruits, metals, wheat, barley, maize, gram, oil, tobacco, timber and piece-goods.

General character of trade.

Of the exports, animals—especially he-goats and male sheep—are sent to Bombay, Gujarāt and Deesa, buffaloes, bullocks and cows to Jaipur and other neighbouring territories, and camels to Sind; cotton to Bombay and Beāwar; hides, dressed and undressed, to Bombay; oil-seeds to Bombay, Ahmadābād and Beāwar; wool to Bombay and Fūzilka (in the Punjab); bones to Bombay and Karāchi; salt and marble (including marble toys and utensils) to different parts of India; and sandstone and millstones to adjacent States or districts.

Exports

The imports are generally from the following places:—sugar from Bareilly, Cawnpore, Chandausi and Muzaffarnagar; opium from Kotah and Mewār; *gur* from Bareilly, Hāthras and Mewār; rice from Chandausi and Sind; dry fruits from Bombay, Broach and Ahmadābād; metals, kerosene oil, timber and ivory from Bombay; tobacco from Pānipat, Mālwa and Nadiā; piece-goods from Ahmadābād, Bombay, Calcutta and Delhi; *mahuā* flowers from Sirohi; and wheat, barley, maize and gram from Sind, the Punjab and the Bombay Presidency.

Imports.

The chief centres of trade are Bālotra, Bārmer, Jaitāran, Jodhpur, Kuchāwan, Merta, Mūndwa, Nāgaur, Nāwn, Pāli, Pipār, Rāni and Sojat; and the trading classes are mostly Mahājans, Bohrās and Brāhmans, very few of them being wholesale dealers. The two most important exports of this State are animals and wool, and while the collecting and distributing agencies for the former are the Parbatsar and Tilwāra fairs mentioned in Chapter IV above, those for the latter are the presses referred to on page 118 *supra*. It has been estimated that about eighty per cent. of the exports and imports are carried by rail, and the rest by camels, carts, bullocks and donkeys, chiefly the first named.

Trading centres, etc.

CHAPTER VIII.

COMMUNICATIONS.

The railways traversing the State are the Rājputāna-Mālwa and the Jodhpur-Bikaner, both of which are on the metre gauge (3' 3 $\frac{1}{2}$ "). The total length of line has increased from 129 miles in 1881, 376 in 1891, and 584 in 1901 to 593 in 1905 and at the present time (1907). There are thus nearly fifty-nine square miles of country to every mile of railway. The districts in no way served are Didwāna and Mārot in the north-east, Phalodi in the north-west, Sānkra, Sheo and Shergarh in the west, and Jālor, Jaswantpura and Sānchor in the south.

The Rājputāna-Mālwa Railway, the older line of the two, belongs to the Government of India and has a length within Jodhpur limits of about 129 miles with twenty stations. The main line (Delhi-Ahmadābād) enters the State near Barr in the east and leaves it a little below Nāna in the south-east; this section was opened for traffic in 1879-80, is about 114 miles long, and its most important station is Mārwar Junction (locally called Khārchī). From Sāmbar (a town held jointly by the Jodhpur and Jaipur Darbārs) a branch, opened some four years before the section just mentioned, runs for fifteen miles across the salt-lake and past Nāwa to Kuchāwan Road Junction. The entire Rājputāna-Mālwa system was leased by Government in 1885 to the Bombay, Baroda and Central India Railway Company; the contract terminated at the end of 1905, but the working has again been entrusted to it under new conditions.

The Jodhpur-Bikaner line is mainly the property of these two States, only a small section being owned by the Government of India; it has been constructed gradually since 1881 and is worked by a special staff employed by the Darbārs. The mileage has increased from 19 in 1882, 44 in 1884, 64 in 1885, 124 in 1887, 291 in 1891, 364 in 1893, 609 in 1900, and 824 in 1903 to 833 in 1905, since when there has been no change. Of the existing length, 463.89 miles belong to Jodhpur, 245.35 to Bikaner (including 22.05 miles in the Punjab and 11.30 in Patiala), and 123.98 (in Sind) to Government. The total capital outlay to the end of 1906 was rather more than 216 lakhs, and in the year last mentioned the net earnings amounted to 22.1 lakhs or a profit of about ten per cent. The line runs north-west from Mārwar Junction to Lūni Junction (whence there is a branch almost due west which joins the North Western Railway at Hyderābād in Sind) and then continues generally north by north-east past Jodhpur, Merta Road and Bikaner to Bhatinda in the Punjab. From Merta Road there are two branches, one connecting the town of Merta with the station and only nine miles in length, and the other running east by north-east to Kuchāwan Road.

In the preceding paragraph the Jodhpur-Bikaner Railway as a whole has been dealt with, and we may now consider the portion thereof belonging to the Mārwar Darbār which, in such matters, has given the lead to all the other States of Rājputāna. The first section, from Mārwar Junction to Pāli (nineteen miles), was opened in July 1882, and was carried on to the Lūni river (twenty-five miles) by June 1884 and to Jodhpur city (twenty miles) by March 1885. Then followed the branch from Lūni Junction to Bālotra and Pachbhadra (sixty miles) in March 1887; the extensions from Jodhpur to Merta Road (sixty-four miles) in April 1891, from Merta Road to Nāgaur (thirty-five miles) in October 1891, and from Nāgaur to the Bikaner border (about twenty-four miles) in December 1891. The branch from Merta Road to Kuchāwan Road (seventy-three miles) was opened in March 1893, while the extension of the Bālotra section westwards to the Sind border (nearly 135 miles) was completed by December 1900; since then, the only addition has been the branch (nine miles) linking the town of Merta with Merta Road in January 1905. The total length of the line within Jodhpur limits is accordingly 463·89 miles, and the capital outlay to the end of 1906 was 122·7 lakhs. The mean percentage of net earnings on capital outlay from the commencement of operations to the end of 1906 has been 7·74, with a minimum of 3·92 per cent. in 1884 and a maximum of 11·40 in 1896. In 1906 the gross working expenses were Rs. 8,67,837, the gross earnings Rs. 20,91,368, and the net receipts Rs. 12,23,531, or a profit of 9·97 per cent. on the capital outlay. Further details are given in Table No. XXVI in Vol. III-B.

Of projected railways, that known as the Bāran-Ajmer-Mārwar would pass through about twenty-one miles of the eastern portion of the State; the earthwork, of which thirteen miles were constructed by famine labour in 1899-1900, has been estimated to cost approximately 3·3 lakhs. Another project, which the Jodhpur and Bikaner Darbārs are prepared to carry out at once, has just been sanctioned by the Secretary of State. The line is to start from Degāna—a station forty-six miles west of Kuchāwan Road on the Jodhpur-Bikaner Railway—and run first north past the towns of Dīdwāna and Lādnun (in Jodhpur) and Sūjāgarh (in Bikaner), and then north-east past Ratangarh, Churu and Rājgarh (all of Bikaner) to Hissār on the Bhatinda section of the Rājputāna-Mālwa Railway. The total length will be 190 miles, namely 60 in this State, 101 in Bikaner and 29 in British territory, and the cost of construction has been roughly estimated at between Rs. 16,000 and Rs. 19,000 per mile, inclusive of rolling-stock.

Projected
railways.

It would be difficult to over-estimate the benefits which the two existing railways (particularly the Jodhpur-Bikaner line) have conferred on the people, especially during periods of famine; without them, many hundreds of persons and cattle would have perished in 1899-1900. They have both levelled and steadied prices, prevented local distress from disorganising rural economy, and stimulated the cultivation of marketable produce. As for the influence which they

Influence of
railways.

CHAPTER IX

FAMINES.

The country falls within the area of constant drought and is liable to frequent famines or years of scarcity. Colonel Tod has described the "condition of two short natural disease" of the western regions, the Jodhpur, "by total length" respective railway statistics to expect "one lean year in three, one famine year in eight, and the local proverb, which was the cap proved very true, for since 1792 the State has been visited by at least one famine in every five years."

When the rains fail, the premonitory symptoms of distress are a rise in prices; a contraction of charity on the part of the less wealthy or its expansion in the case of the more moneyed; a diminution of credit and a consequent enhancement of the rate of interest on loans; a feverish activity in the grain trade: an increase in petty

crime; and an unusual stream of emigration of the people accompanied by their flocks and herds.

Famines may be classified thus according to their intensity:—*ankāl* or grain famine; *jalkāl* or scarcity of water; *ṭinkāl* or fodder famine; and *trikāl*, when grain, water and fodder are all scarce.

Of the famines which occurred prior to 1868 there is hardly any record save tradition, but the State is known to have been afflicted in 1792, 1804, 1812-13, 1833-34, 1837-38, 1848-49, 1850 and 1853-54. Of these visitations, that of 1812-13 was the most calamitous as the crops failed completely and there was great scarcity of water; the price of grain rose to three seers per rupee, and the mortality among human beings was appalling. Grass was, however, fairly abundant, and the herds generally were saved.

Early
famines.

In 1868 a little rain fell in June and July but, with the exception of a couple of storms in the south on the 1st and 2nd of September, none was received subsequently, and the entire State was affected. It was reported at the time that on no former occasion had such a failure of grain and forage been simultaneous; indeed, the latter was so scarce in some places that, while the price of wheat was six, that of grass was $5\frac{1}{2}$ seers per rupee, and as regards water, many of the poor at the capital were able to earn a livelihood by bringing it in and selling it at from $1\frac{1}{2}$ to $2\frac{1}{2}$ annas for a *gharā* or earthen pot. The people left in enormous numbers with their flocks and herds for Gujarāt and Mālwa, but, as these territories were themselves in distress, the emigrants became aimless wanderers and died in thousands; most of the survivors returned in May 1869 in the belief that the rains would be early, but the monsoon did not break till the 19th July and there was no rain in Jodhpur itself till the 9th September. A second time they rushed away, but cholera broke out among them and they fell an easy prey. When the rains set in, agricultural operations were started and, owing to want of cattle, small ploughs were made and the men yoked themselves thereto in place of oxen, while the women dropped in the seed. About half of the usual area of land was sown and the harvest was promising well when swarms of locusts appeared and destroyed seventy-five per cent. of it. The grass crop of 1869 was, however, luxuriant, and the species known as *bharūt* yielded a large quantity of seed which was as valuable in Mārwar as the manna of old to the Israelites. To crown all, the heavy rains of September and October were followed by a virulent outbreak of fever to which about one-fifth of the entire population is said to have succumbed.

Famine of
1868-69.

The import duty on grain was abolished and food was distributed at various places by some of the Rānīs, Thākurs and wealthy inhabitants, but the Mahārājā, beyond placing a lakh of rupees at the disposal of the Public Works department in 1869, did nothing. The highest recorded price of wheat was $3\frac{3}{4}$ seers per rupee at Jodhpur city, but even here and at Pāli (the two principal marts) no grain was to be had for days together. It was estimated that from cholera, fever and starvation the State lost one-third of its population, and

the mortality among cattle was put at no less than eighty-five per cent. The horses of the cavalry detachment at Mallāni were let loose to take their chance of life by feeding on the grass-roots beneath the sand, and the official in charge of that district was quite unable to procure fodder for his sole horse which he unsuccessfully offered for sale at one-eighth of its value. In the same locality, the rate of hire of a camel for ploughing purposes was Rs. 3 a day, and of a pair of bullocks Rs. 4.

In 1871-72 the *khariif* crops entirely failed in certain districts, and in the following year were much injured by locusts. One flight of these animals was described as being four miles in length by one hundred feet in depth, and as taking four hours to cross a road.

The next great famine was in 1877-78, when the rainfall was but 4½ inches and the *khariif* crops yielded one-fourth and the *rabi* one-fifth of the usual out-turn; grass was also very scarce. Large numbers emigrated with their cattle, and the Darbār arranged to bring the majority back at its own expense, but it was estimated that 20,000 persons and 80,000 head of cattle were lost, and this bad season cost the State about ten lakhs.

The year 1891-92 was one of triple famine—grain, water and fodder—and is further noticeable as having been the first occasion on which the provisions of the Famine Code for Native States were, with certain deviations, carried out in practice. The rainfall (6½ inches) was untimely and badly distributed, and the distress was most acute in Mallāni, Pachbhadrā, Phalodi, Sānchor, Shergarh, Siwāna and part of Jodhpur, while curiously the desert districts of Sāukra and Sheo received an unusual fall of rain and escaped. Nearly 200,000 persons emigrated with about 662,000 cattle, and only sixty-three per cent. of the former and fifty-eight per cent. of the latter were said to have returned. When distress appeared, two large and important public works, namely, the earthwork of the railway and the embankment of the Jaswant Sagar, happened to be in progress, and they were utilised to the utmost extent found possible; in addition, the people were employed in clearing the railway line near Bālotra of drifted sand, and several petty works, intended mostly for irrigation or water-supply, were started at different times from May 1891 as occasion required. The daily average number of labourers employed varied from 370 to 8,354, and altogether about 849,000 units* were relieved on works at a cost of Rs. 84,347. Poor-houses were established at the capital and the headquarters of the affected districts, and 23,500 units received full meals of cooked food; there was also the usual volume of private charity. The direct expenditure, including wages paid on ordinary public works, exceeded 5½ lakhs, while remissions of land revenue and suspensions of tribute, etc. due from *jāgīrdārs* amounted respectively to about 2·8 and 1·6 lakhs. Cholera appeared in March 1892 and lasted till late in September, claiming nearly 8,500 victims, and it was closely followed

*A "unit" means one person relieved for one day.

by malarial fever which carried off a large number of people, chiefly children. The Jodhpur-Bikaner Railway proved a great boon, bringing in about fourteen times as much grain as in ordinary years and large quantities of grass; the average prices of food-stuffs in seers per rupee were:—wheat ten to eleven, barley thirteen to fifteen, *bājra* eleven to thirteen, and *jowār* twelve to fourteen, or from two to three seers higher than the average of the previous three years.

A succession of bad seasons, commencing from 1895-96, culminated in the terrible famine of 1899-1900. At the capital less than an inch of rain fell in 1899 (forty-three cents in June and fifty-three in September), while two of the western districts, ~~Sānkarn and Siro,~~ received but fourteen cents each. The result was that the *khari* crops were entirely lost, there were no *rabi* sowings, and grass was to be found only in small quantities at the base of the Aravallis. Emigration with cattle began in August, but it was long before the people realised that Mālwa, where salvation is usually to be found, was equally afflicted by drought. Some thousands were railed back to relief works in Jodhpur at the expense of the Darbār, and thousands more returned by road, after losing their cattle and selling all their household possessions; the mortality among the latter was grievously heavy. Relief measures were started on a scale never before attempted in the autumn of 1899 and were continued till September 1900; during this period about thirty million units were relieved at a total cost of 29·3 lakhs and, in addition, nearly 9½ lakhs of land revenue, or about ninety per cent. of the demand, were remitted. The forests were thrown open to unrestricted grazing by horned cattle, and the people were allowed to collect, free of charge, grass, fodder, leaves, and all edible or saleable roots and fruits, as well as the bark of certain trees; the value of these concessions was estimated at about Rs. 21,000.

Famine of
1899-1900.

The relief works were divided into two classes, the first consisting of large projects under the Public Works department and the second of petty works under civil agency. On the former, which were by far the more important, the labourers were divided into gangs and given set tasks, while the civil agency works were at first carried out on the contract system, but, as distress deepened, the authorities had to resort to individual tasks. The daily average number of persons employed on relief works from December 1899 until the monsoon broke in July 1900 was about 89,000, the high-water mark being reached on the 10th March 1900 when a total of 123,691 was recorded. Gratuitous relief took the form of kitchens (usually as adjuncts to relief works), poor-houses, orphanages, and a chain of collecting camps necessitated by the geographical position of Mārwar and the nomadic tendencies of the people; cash advances were given to the police and various *jāgīrdārs* to enable them to supply starving wanderers with food, and *pardā-nashīn* women and others, whom neither their own feelings nor popular opinion would allow to work in public, were relieved by doles of grain conveyed through respectable agents. In addition to these measures, the

agriculturists were assisted with loans for the purchase of seed and cattle; bullocks and hand-ploughs were distributed, and private charity was very conspicuous.

Thanks to the two railways, prices remained fairly steady, the highest quotations having been wheat $6\frac{3}{4}$ seers, *hājra* and *jowār* about 8 seers, and barley $9\frac{1}{4}$ seers per rupee. There was, however, no fodder crop worthy of the name, and for some time grass was nearly as dear as grain: the mortality among the cattle was very great and was estimated at nearly a million and a half. The census of 1901 shows that deaths among human beings must have been very numerous, but it is impossible to say what proportion was due to the famine and what to other causes: it should, however, be remembered (i) that the people who returned from Central India at the beginning of the cold weather of 1899 brought back smallpox with them, and the disease spread all over the State; (ii) that cholera broke out in December 1899 and, though persistently kept in check, was not thoroughly eradicated till September 1900; and (iii) that the last few months of 1900 were marked by an exceedingly virulent outbreak of fever, which is said to have caused more deaths than want of food in the period during which famine conditions prevailed. Of the relief measures generally, it may be said that the Darbār fully recognized its responsibilities to its subjects and adopted a generous policy from the outset. No State embarked on the campaign with greater physical disadvantages to overcome or more crippled resources, and the results described in the exhaustive and valuable report written by its Famine Secretary could have been achieved only by exertions of which any administration might justly feel proud.

The crops harvested in the autumn of 1900 and in the succeeding spring were good, but the monsoon of 1901 was weak and ceased early, and there was scarcity over about 17,000 square miles, chiefly in the western half of the State; locusts also caused considerable damage. Relief works, started in November 1901 and closed in October 1902, gave employment to nearly 445,000 units, while about 242,000 units were fed in poor-houses. The direct expenditure was Rs. 51,625, and remissions and suspensions of land revenue amounted respectively to 56 and 16 lakhs in round numbers.

In 1901 the rainfall was generally scanty and badly distributed, and the result was a partial failure of the *kharij* crops in nine districts, particularly in Sīnkra and Sheo. Prices, however, remained steady and low, and the relief works and poor-houses at no time attracted any large number of people. The occurrence of frosts in the abnormally severe and prolonged winter of 1904-05, followed by an almost complete failure of the south-west monsoon in 1905, caused considerable distress among the agriculturists and anxiety to the Darbār, but a crisis was happily averted by a cyclonic storm which passed over the State in September 1905 and by fairly good rain in the following February. Still an area of approximately 7,400 square miles, comprising the districts of Jodhpur, Nāgaūr, Pāchāsī, Pālish, Sīnkra, Sheo and Shergarh, together with parts of Marwar

and Pāli, was affected, and the usual measures of relief were instituted. Altogether 1,691,788 units were relieved either on works or gratuitously, namely nearly seventy-six per cent. by the Darbār, seventeen by private individuals, and the rest by *jāgīrdārs*. The expenditure by the Darbār, including some Rs. 41,600 advanced to cultivators, Thākurs and others, exceeded 1·8 lakhs, and if to this we add remissions of land revenue (5·73 lakhs) and losses under customs and certain other heads (about Rs. 87,000), the visitation may be said to have cost the State about 8·4 lakhs. On the other hand, there was an increase of nearly Rs. 1,50,000 in railway receipts, which may be directly ascribed to the scarcity, and if this be taken into consideration, the loss to the State would fall to approximately seven lakhs.

The chief steps taken to protect Mārwar against the extreme effects of drought have been the opening up of the country by means of railways; the construction of wells and tanks for the storage of water; the establishment of fuel and fodder reserves; and the conservation of the forests. The greatest safeguard, however, consists in the migratory habits of the people. A local proverb runs somewhat to the following effect:—

Protective
measures.

“August’s here; no sound of thunder;
Sky is clear and weather fine;
Wife! ’tis time for us to sunder,
You to your folk, I to mine.”

Indeed, the traditional custom of the inhabitants is to leave with their flocks and herds on the first sign of scarcity, before the grass withers and the scanty sources of water-supply dry up. Emigration has no terrors for the Mārwarī ryot, but is looked on by him as one of the ordinary incidents of his life; moreover, many of them migrate annually during the comparatively rainless winter months and find work in the rich valleys of the Indus or the opium fields of Kotah and Mālwa.

CHAPTER X.

ADMINISTRATION.

The State is ordinarily governed by the Mahārājā with the assistance of the *Mahakma khās* (a special department consisting of two members) and a consultative Council (now comprising five members, four of whom are *ṭīnākīrs* or nobles). The degree of control exercised by the Political Officer accredited to Jodhpur varies with the limits placed on the chief's ruling powers; under existing conditions the Resident takes an active part in the guidance of the administration, subject to the control of the Governor General's Agent in Rājputāna.

Subordinate to the *Mahakma khās* are a number of departments with a separate officer at the head of each. Among them may be mentioned the Manager of the Railway, the State Engineer, and the Auditor of accounts, all of whom are European officers; the Inspector-General of Police; and the Superintendents of the Customs, Excise (*ābkāri*), Forests, Land Revenue (*hawāla*) and Stamp and Registration departments.

For administrative purposes the territory is divided into twenty-three districts or *hukāmats*, each under an officer styled *Hākīm*. In Mallāni, however, there is, in consequence of its peculiar tenure, size and recent restoration to the Darbār, an official termed Superintendent, while the north-eastern districts have also a Superintendent to dispose of border cases under the extradition agreement entered into with the Bikaner and Jaipur Darbārs.

Mention may here be made of the tract known as Mārwar-Merwāra, which is remarkable from the fact that, while the Government of India exercises full and permanent administrative control, the Jodhpur Darbār retains its sovereign rights therein. The District of Merwāra was subdued between 1819 and 1821 by a British force aided, to some extent, by Jodhpur and Udaipur troops, and both these States put forward claims to share in the conquered territory. Accordingly two *parganas* (Chāng and Kot Kirāna) were allotted to Jodhpur, three to Udaipur, and the remaining four were retained by the British Government. Of the Jodhpur villages, some were made over to the Darbār and placed under the adjoining Thākurs, and others were managed by the Superintendent of Ajmer; but while the latter were kept under control, disorder reigned in the former. The divided jurisdiction gave criminals an asylum, and it was soon found that the dual form of government was worse than ineffectual. Eventually, in 1824, the Jodhpur Darbār handed over twenty-one villages to be managed by the British Government for a period of eight years, on the condition that it received the net revenue derived therefrom, and further agreed to pay Rs. 15,000 a year towards the expenses of

interstatal ; and we will deal with them in this order.

The State tribunals number altogether eighty-five, and consist of (a) forty-one courts presided over by officials employed by the Darbār, and (b) forty-four courts presided over by *jāgīrdārs* or their managers (*kāmdārs*). To the first group belong the nine *hawālā* courts ; the twenty-three *hukūmat* courts ; the Jodhpur *kotwālī* ; the Mallāni *munsifī* ; the courts of the two Superintendents of circles ; the Civil Court (*Sadr Dīwānī*) ; the Criminal Court (*Sadr Faujdārī*) ; the Appellate Court ; the Court of Sardārs ; and the *Mahakma khās*.

Of the *hawālā* courts, eight are presided over by the *darogās* of the like number of circles into which the State has been divided for land revenue purposes, namely Bāli, Bilāra, Dholera, Jālor, Jodhpur, Merta, Nāgnur and Nāwa. Each *darogā* deals with civil suits not exceeding Rs. 100 in value, provided that both parties thereto are inhabitants of the villages in his circle. The ninth court is that of the Superintendent ; it is located at the capital and disposes of appeals against the decisions of the *darogās*.

The *Hākims*, within their respective charges, try civil suits not exceeding Rs. 500 (or, with the permission of the Civil Court Rs. 1,000) in value, and in criminal cases can pass a sentence of imprisonment up to four months, fine up to Rs. 200, and whipping not exceeding six stripes. The Jaswantpura *Hākim* has been given powers in suits not exceeding Rs. 700 in value.

The jurisdiction of the Jodhpur *Kotwāl* is confined to the capital and its suburbs ; he has the same criminal powers as the ordinary *Hākim*, and can decide civil suits, the value of which does not exceed Rs. 1,000 (or, with the sanction of the Civil Court, Rs. 2,000).

To the Mallāni *Munsif* is entrusted the disposal of all cases relating to land situated in that extensive district. The Superintendent of Mallāni and the western *hukūmat*s exercises, within Mallāni, an unlimited civil original jurisdiction and criminal powers up to two years' imprisonment and fine of Rs. 1,000, appeals against his decisions lying to the *Mahakma khās* ; in Sheo and Pachbhadra, on the other hand, his powers on the civil side are confined to the trial of suits not exceeding Rs. 1,000 in value, which in criminal cases he can punish with one year's imprisonment and Rs. 1,000 fine, appeals against his decisions being heard by the Civil or Criminal Court as the case may be. The Superintendent's sentences of one month's imprisonment or fine of Rs. 25 are final. He also disposes of appeals from the orders of the *Hākim* and *Munsif* of the *Sub-Divisions* and of the *Hākims* of Sheo and Pachbhadra.

The Superintendent of the north-eastern district (the *Sub-Divisions*, Mārot, Parbatsar and Sāmbhar) disposes of suits not exceeding Rs. 1,000 in value, and can, on the criminal side, pass a sentence of six months' imprisonment, fine of Rs. 500, and whipping up to twelve stripes. He also enjoys interstatal jurisdiction, i.e. he can deal with cases in which the tracks of persons guilty of having committed certain offences in Jodhpur territory are proved to terminate in either the Bikaner or the Jaipur State.

The Civil Court at the capital (*Sadr Diwāni Adālat*) hears appeals against the findings of the *Hākims* (save of Mallāni, Pachbhadra and Sheo), the *Kotwāl*, and the two Superintendents (except in Mallāni cases), and tries original suits not exceeding Rs. 5,000 (or, by order of the Appellate Court, Rs. 10,000) in value, with the exception of those in which either a Rājput *jāgirdār* is concerned or a question of adoption is at issue. It further has an insolvency side for all except Rājput *jāgirdārs*, and every person unable to pay the court-fees has to be certified as a pauper by this tribunal.

The Criminal Court (*Sadr Faujdāri Adālat*) consists of two tribunals, one presided over by a Magistrate and the other by an Assistant Magistrate. The former has both appellate and original powers; he hears appeals from the decisions of (i) the *Hākims* (except of Mallāni, Pachbhadra and Sheo), (ii) the *Kotwāl*, (iii) the two Superintendents (save in Mallāni cases), and (iv) the Assistant Magistrate; and, on the original side, he can punish with imprisonment not exceeding two years and fine up to Rs. 1,000, his sentence of imprisonment up to one month or fine up to Rs. 50, and his order in appeals of imprisonment up to three months and fine of Rs. 100 being usually final, though subject to revision by the *Mahakma khās*. The Assistant Magistrate ordinarily deals with offences punishable with imprisonment not exceeding six months and fine up to Rs. 100, but can, with the permission of the Magistrate, take up more important cases.

The Appellate Court hears appeals from the decisions of the Civil and Criminal Courts, tries original suits exceeding Rs. 5,000 in value and all adoption cases in which a Rājput *jāgirdār* is not concerned, and can pass a sentence of imprisonment of ten years and fine of Rs. 5,000. Its orders confirming the decrees of the lower courts in civil cases, and its sentences not exceeding one year's imprisonment and Rs. 500 fine in criminal cases are usually non-appealable.

The Court of Sardārs has both original and appellate jurisdiction in all civil cases in which Rājput *jāgirdārs* are concerned and, like the Criminal Court, consists of two tribunals, one under a Superintendent and the other under an Assistant Superintendent. The latter is in charge of the insolvency side, and is also authorised to try suits not exceeding Rs. 2,000 in value as well as miscellaneous cases. The Superintendent hears appeals against the orders of his Assistant and takes up all cases beyond his powers, but, in the trial of land or adoption suits to which a *tāzīmi* Sardār is a party, he acts in conjunction with a Thākūr, nominated by the *Mahakma khās* as a joint judge of the court; and should this Thākūr happen to be himself a party to the suit, another is appointed specially for the occasion.

The *Mahakma khās* exercise full powers of revision and control over all the subordinate courts, and is the highest judicial tribunal in the State, hearing appeals against the decisions of the Court of Sardārs, the Superintendent of the western districts (in Mallāni cases) and the various *jāgirdārs'* courts. It is practically the final

court of appeal on both the civil and criminal sides, as its capital sentences and orders in important cases in which the *jāgīrdārs* are concerned alone require the confirmation of the *Mahārājā*.

The *jāgīrdār* courts are divided into three grades, namely—(a) those authorised to try civil suits not exceeding Rs. 1,000 in value and to pass a sentence of six months' imprisonment and Rs. 300 fine; (b) those possessing exactly half of these powers; and (c) those which can take up suits of a value not exceeding Rs. 300, and can punish with one month's imprisonment and fine up to Rs. 100. Appeals lie to the *Mahakma Khās*, which also decides cases beyond the powers of any of these courts. The *jāgīrdār* who possess powers are obliged to keep, as their assistants, persons trained in judicial work and approved by the *Mahakma Khās*; the number of tribunals, and the powers exercised by them consequently vary from time to time, and at present there are twenty-six in the first, seven in the second, and eleven in the third grade.

Turning now to courts established by the Governor General in Council, mention may first be made of those having jurisdiction in that portion of the State which is occupied by the Rājputāna-Mālwa Railway. On the short branch from Sāmbar to Kuchāwan Road, most of the civil suits are disposed of by the Judicial Assistant Commissioner, Ajmer, (a Court of Small Causes), while the more important ones go before the Resident at Jaipur (a District Court). On the rest of the line, i.e. from near Sendra on the east to the Sirohi border in the south-east, all civil suits are decided by the Assistant Commissioner of Merwāra, who has the powers of a Court of Small Causes and a District Court. For the disposal of criminal cases there are the courts of the Superintendent and the Assistant Superintendent of the Railway Police—the former having first, and the latter second class magisterial powers; over them is the District Magistrate (the Resident at Jaipur for the Sāmbar-Kuchāwan Road branch, and the Resident at Jodhpur for the rest of the line within Mārwar limits). The Commissioner of Ajmer is Sessions Judge for both of the above sections, and the Governor General's Agent in Rājputāna is High Court and Local Government for the entire line in the Province.

As regards lands occupied by the Jodhpur-Bikaner Railway, the *Mahārājā* has agreed to cede to the British Government full criminal and civil jurisdiction over that portion situated in his territory, but has not yet been called on to do so; arrangements for taking it over are, however, now in progress.

Next come the courts established at the salt sources of Sāmbar, Didwāna and Pachbhadrā, the presiding officers of which are Assistant Commissioners of the Northern India Salt Revenue Department. The Judge of the Sāmbar court has the powers of a first class magistrate while the other two officers are second class magistrates. These powers are exercised within defined limits which, in the case of Sāmbar and Didwāna, are for certain purposes deemed to be divisions of the Ajmer District; at Pachbhadrā, however, the Resident at Jodhpur is both District Magistrate and Sessions Judge (no appeal lying

from any sentence or order passed by him in the former capacity), and the Agent to the Governor General is High Court.

Lastly, certain officers, being European British subjects, have been appointed Justices of the Peace, namely the Resident and the First Assistant to the Governor General's Agent for the entire State (committing accused persons for trial to the High Court at Bombay), and the Judge at Sāmbhar within the limits of the jurisdiction of that court (committing to the High Court at Allahābād).

Of interstatal courts, that of the Superintendent of the north-eastern district has already been noticed; a similar tribunal for the disposal of border cases between Jodhpur and Jaisalmer is on its trial. There remains only the Mārwar Court of Vakils, established about 1844 with the special object of securing justice to travellers and others who suffer injury in territories beyond the jurisdiction of their own chief, and deciding on all offences against person and property which cannot be dealt with by any one State. It is under the supervision of the Resident and is composed of the Vakils in attendance on him; appeals against its decisions lie to the Upper Court of Vakils at Abu, and sentences exceeding five years' imprisonment or awards for compensation exceeding Rs. 5,000 require the confirmation of the Upper Court. The average number of cases decided yearly by the Mārwar Court of Vakils was 105 during the ten years ending 1890-91 and 47 during the succeeding decade; the actual figures for 1906-07 were 136. Appeals are rare, averaging about six or seven annually.

Interstatal
courts.

The system of registration was introduced in 1899; the Act of that year made obligatory the registration of documents relating to immovable and movable property worth more than Rs. 500 and Rs. 400 respectively, but by the amending Act of 1902 these figures were reduced to Rs. 400 and Rs. 200 respectively. The total number of documents registered up to the 31st March 1906 was 9,328, the figures for individual years having been: 1,184; 954; 1,316; 1,407; 1,159; 1,477; and 1,831; or an annual average of 1,332. There are twenty-three offices, namely one at the capital (where more than half of the work is usually done) under the Registrar, and the rest at the headquarters of districts under the *Hākims* as sub-registrars. The value of the property involved in the 1,831 documents registered in 1905-06 was about 32·7 lakhs, and the fees realised amounted to Rs. 8,904. The *tāzīmi* Sardārs are also authorised to register documents relating to property, the value of which does not exceed the limit of their civil judicial powers, provided that both parties to the transaction reside within their jurisdiction.

Registration.

CHAPTER XII.

FINANCE.

Of the revenues of Mārwar in former times very little is known. In some old documents to which Colonel Tod had access they were given as about eighty lakhs a year, namely *khālṣa* or fiscal nearly thirty lakhs and the income of the feudal and ministerial estates fifty lakhs; but, with reference to the above, Tod observed that "if they ever did reach this sum, which may be doubted, we do not err in affirming that they would now be overrated at half that amount." Captain Ludlow, the first Political Agent of Jodhpur, reported in 1846 that the ordinary *khālṣa* revenue ranged between seventeen and nineteen lakhs a year, and in 1869-70 it was estimated at thirty lakhs.

During the ten years ending 1900-01, the actual receipts from ordinary sources averaged 47.7 lakhs annually, and, if extraordinary receipts, such as loans from the Government of India and the Mysore Dārbar, be added, the total would be 60.2 lakhs. The average yearly expenditure during the same period was:—ordinary 44.8 lakhs; extraordinary 14.9 lakhs, total 59.7 lakhs. At the present time, the normal revenue may be put at about 56, and the ordinary expenditure at about 42 lakhs of rupees a year. The above figures represent only the fiscal receipts and disbursements, that is to say, the *khālṣa* revenue and expenditure; the annual income of the *jāgīrdārs*, *ināmdārs* and others holding on privileged tenures has been roughly estimated at fifty lakhs, and consequently the gross annual revenue of the State may be said to be about 106 lakhs.

The *khālṣa* revenue is derived chiefly from five sources, namely (i) salt, including treaty payments, royalty, etc., nearly 15.3 lakhs; (ii) customs 10 to 11 lakhs; (iii) railway a similar amount; (iv) land revenue, including irrigation fees, 8 to 9 lakhs; and (v) tribute from *jāgīrdārs*, succession fees, etc., rather more than three lakhs. The main items of expenditure are: army, including police, about 9 lakhs; civil establishment 9 lakhs; Public Works department (ordinary) 5 to 6 lakhs; palace and household 3 lakhs; and tribute to Government (including payment for the Erinpara Regiment) nearly 2½ lakhs.

Of the five principal sources of revenue mentioned above, the railway is of recent growth, and in comparing the present with past methods of taxation, (i) land revenue, (ii) salt, (iii) customs, and (iv) tribute and succession fees from *jāgīrdārs* need only be dealt with. Colonel Tod notices the same items, though sometimes under different names. The first was collected in kind, the produce being divided equally between the Dārbar and the cultivator; the latter had also to remunerate the man told off to watch the crops, as well as

other officials who attended the process of division (*batai*), and in addition, certain cesses or taxes, such as *kharrā*, *ghasmāri*, etc., were levied. Salt was worked in a crude fashion under the supervision of the local officials, but nevertheless formed the most certain branch of income. The customs revenue was derived from transit, as well as from import and export duties; grain, whether of foreign importation or home-grown, was taxed, even though it was being transported from one part of the State to another. As for the fourth item (tribute and succession fees), there was no fixed standard to compute it, but feudal contingents were provided by the *jāgīrdārs* at the rate of one foot-soldier for every Rs. 500, and one horseman for every Rs. 1,000 of income. Besides the above, there was no limit to the extortionate demands of the chief or of the collectors, and when the land revenue and customs were, as was very often the case, leased out, the lessee proved a source of constant harassment to the poor *ryot*; the *jāgīrdārs*, too, had not infrequently to appeal to arms.

To Mahārājā Takht Singh is due the credit of systematising the valuation of *rekh* (tribute from the *jāgīrdārs*) and the succession fee called *hukmnāma*, and it was in his time (1870) that the Jodhpur portion of the Sāmbhar lake and the salt marts of Nāwn and Gūdhā were leased to the British Government. In 1879, when Jaswant Singh was ruling, four other salt sources were leased in the same way and, shortly afterwards, the Darbār turned its attention to the reorganisation of the remaining departments. By 1883 a reformed customs tariff (which, with a few important modifications, is in force to this day) had been introduced; the main features were (i) the abolition of some of the transit-duties and a thousand and one petty *lāgs* (imposts), as also the duty on edible grains brought in for consumption; (ii) a reduction in the duties on the common necessities of life; and (iii) an enhancement of those on articles of luxury. The land revenue department was next taken in hand. The *khālā* area, which had been duly surveyed between 1883 and 1893 under the superintendence of the late Colonel Loch, was regularly assessed on the *bighori* system between 1894 and 1896 by Rao Bahādur Pandit Sukhdeo Prasād. The basis of assessment was the old *batai* collections together with certain cesses, and the equitability of the rates was ensured by checking them with the grain and cash rents and with the average revenue of the preceding ten years. The cesses, representing certain percentages on the revenue, formerly numbered sixty-four and were reduced to four only, namely *kharrā*, a house or income tax; *ghasmāri* or grazing fee; *chaudharbāb*, for the remuneration of the *chaudhris* or headmen; and *malba*, for village expenses. Of the above, the first two were levied from non-agriculturists, and the last two from agriculturists.

Prior to 1885 there was no general treasury in the State; the practice was to spend the revenues in advance, to assign the actual receipts to a banker of Ajmer, and to draw on him for expenses from time to time, paying him both interest and discount for these advances. A treasury was, however, established on the 1st April

System of
account and
control.

1885 and a regular budget system introduced. In 1902 the services of the Auditor of the Jodhpur-Bikaner Railway (a Government official) were utilised for auditing and checking the State accounts, and a special office was then started and placed under him. The system of accounts is what is known as *Mahājānī jamā kharch*; all receipts and disbursements are daily posted in the ledger, from which the entries are duly tabulated under the various heads, and cash balances are drawn up at the close of each day.

The liabilities of the State, including the personal debts of the Mahārājā (some 4·2 lakhs), amounted on the 30th September 1906 to 34½ lakhs in round numbers, and of this sum, 25½ lakhs were due to the Mysore Darbār, having been borrowed in 1898 to permit of the extension of the Jodhpur-Bikaner Railway to the Sind border. Against these debts, however, the State has a very valuable asset in its share of the railway just mentioned, the capital outlay thereon to the 31st December 1906 having been 122·7 lakhs and the actual market value thereof being estimated at the present time at about 274 lakhs; in addition, the recoverable arrears and advances amounted to 18·3 lakhs, the investments to 17·2 lakhs, and the actual cash balance in the treasury on the date last quoted to more than 12 lakhs. In this way the liabilities may be said to be between one-ninth and one-tenth of the realisable assets, and the financial outlook is far from unsatisfactory. The Mysore loan will certainly be repaid at the fixed time (October 1908) and, with normal seasons and a continuance of the present good management, the State should then be free of debt.

The earliest Jodhpur coins of which there is any mention are the copper pieces issued by Amar Singh, the elder brother of Mahārājā Jaswant Singh I, at Nāgaur in the seventeenth century, and called after him Amar Shāhi. They were without impress on one surface, while on the other they bore an inscription in Persian characters within a square border; the average weight was 255 grains. Next come the coins of Mahārājā Ajit Singh, believed to have been minted at Ajmer in or about 1721; it is not known of what metal they were made, and specimens, if they exist at all, are very rare. In the time of Mahārājā Bijai Singh (1753--93) a mint was established at Pāli, and the coins struck there (and subsequently at other places) were called Bijai Shāhi; they consisted of gold, silver and copper pieces. Lastly, towards the end of the eighteenth century, silver coins, known as Iktisanda, were minted at Kuchāwan. In addition to the Bijai Shāhi and Iktisanda, the following issues of other States were current in Mārwar during the nineteenth century and are still to be found:—(i) the Akhai Shāhi of Jaisalmer (in the western districts); (ii) the Jhār Shāhi of Jaipur (in the north-eastern districts); (iii) the Chandori of Udaipur (used on ceremonial occasions); and (iv) the Bhilāri of Udaipur (in the hilly tracts in the south-east and south).

The Bijai Shāhi silver coins consisted of the rupee, eight-anna and four-anna pieces, and were first struck in 1761. For nearly one hundred years the name and symbol of Shāh Alam II were shown, the

inscription on the obverse running *Sikka mubārak bādshāh ghāzi Shāh Alam* and on the reverse *Sunat 22 jalūs maimanat māmūs zarab-i-lār-ul-mansūr Jodhpur*—both in Persian. Coins bearing Her late Majesty's name were first issued in 1858 with the following inscriptions in Persian: on the obverse *Ba-zamān-i-mubārak Queen Victoria malikah muazzamah Inglistān wa Hindustān*, and on the reverse *Mahārājā Dhirāj Srī Tukht Singh Bahādur zarab-i-Jodhpur*; but the dies were altered some ten years later, and the issues of 1869, 1870 and a few succeeding years had *Ba-ahd-i-Queen Shāh-i-Hind wa Farang zar wa sīm rā sikka zad Tukht Singh* in Persian on the obverse, and on the other side *Srī Mātājī* in Hindi and *Zarab-i-Jodhpur Mārur 1926* in Persian. From 1873 onwards the inscriptions on either surface were the same as in the 1858 issue except that the name of Jaswant Singh was substituted for that of Tukht Singh, the date or *Samvat* was entered in Persian, and the words *Srī Mātājī* were added in Hindi on the reverse. The special mint marks on the Bijai Shāhi coins were a *jhār* or spray of either seven or nine branches, a sword, and sometimes a dagger.

The following is a brief account of the currency known as Iktisanda. On the advent of the Marāthās, the imperial mint at Ajmer was closed, and the minters were on their way to Delhi with the dies when they were intercepted at Kuchāwan and induced by the Thākūr of that place to settle there. The Thākūr, being in high favour with the Mahārājā, obtained permission to strike silver coins of the Ajmer type, and a mint was accordingly established. The coins turned out consisted of rupee, eight-anna and four-anna pieces, and there have been two issues. In the first, the inscription on the obverse was the same as in the early Bijai Shāhi coins with the addition of a sword over the word *Shāh*, while that on the reverse was (in Persian) *Sunat 31 jalūs maimanat māmūs zarab-i-dār-ul-khair Ajmer*. From the opening words it derived the name Iktisanda—the thirty-first year of Shāh Alam's reign, which began in 1759 and closed in 1806. In the second issue, which appeared in 1863, the Persian inscriptions were *Queen Victoria malikah muazzamah Inglistān wa Hindustān* with a flower over the word *Queen* on the obverse, and *Zarab-i-Kuchāwan ilāqā Jodhpur sanāt Iywi* (for *Isuf*) 1863.

Iktisanda
silver coins.

The Bijai Shāhi coins have been minted at various times at Pāli, Sojat, Jodhpur, Merta and Nāgaur, and the Iktisanda only at Kuchāwan; and the total number of rupees struck at these mints from the commencement of operations till the year 1900 is said to have exceeded 36½ millions, of which some 3½ millions were Iktisanda. Up to 1893 the Bijai Shāhi rupee was of about the same value as the British, while the Iktisanda exchanged for eleven or twelve Imperial annas; but the closure of the Government mints to the unrestricted coinage of silver caused the local coins to depreciate in value to such an extent that in 1899 Rs. 122-12 Bijai Shāhi or Rs. 150 Iktisanda exchanged for Rs. 100 British. The Darbār accordingly resolved to convert its local rupees and to introduce Imperial currency as the sole legal tender in the State; and this very desirable reform was carried

out in 1900. The Government of India having fixed the rate of exchange at ten per cent. for Bijai Shāhi and fifty per cent. for Iktīsanda, a circular was issued on the 1st May 1900 (i) inviting the public to bring their local coins to certain branch treasuries and exchange them for British rupees at the above rates in the course of the succeeding six months, and (ii) warning them that, after the 1st November 1900, Imperial currency would be the sole legal tender in Mārwar and no local rupees would be accepted in payment of State dues. The balance in the treasury being quite insufficient for the carrying out of the scheme, the Government assisted with an advance of fifteen lakhs, free of interest, and agreed to recoin the local into British rupees up to a maximum amount of two crores (twenty millions). As a matter of fact, the total number of rupees tendered for conversion during the six months was 10,227,134 (namely 9,273,628 Bijai Shāhi and 953,506 Iktīsanda), and these were recoined at the Calcutta mint, the entire cost of the operations, including transit charges, establishment, escort, etc., amounting to Rs. 34,506 or less than $5\frac{1}{2}$ annas for every hundred rupees dealt with. Another noteworthy feature was that, though nearly $10\frac{1}{4}$ million rupees were despatched to Calcutta, only five coins were rejected as faulty by the authorities of the mint there, and for this remarkable result great credit is due to the experts whom the Darbār employed at each collecting centre.

CHAPTER XIII.

LAND REVENUE AND TENURES.

Of the 4,030 villages in Mārwar, only 687 are *khāṣi*, or under the direct management of the Darbār, and they occupy about one-seventh of the entire area of the State; seventy-four of the above villages are *mushṭarka*, that is to say their revenues are shared by the Darbār and certain *jāgīrdars* jointly. The rest of the territory is held on one of the following tenures, namely *jāgīr*, *ḡāḡar*, *ḡāḡan*, *dehṭi*, *bhām*, *inām*, *ḡawāṭa* and *nāḡḡar*.

The *jāgīrdars* pay a yearly military *con* called *ṛāḡḡ*, which is supposed to be eight per cent. of the gross rental value of their estates, and have to supply one horseman for every thousand rupees of revenue, or one camel *ḡawāṭi* for every Rs. 750, or one foot-soldier for every Rs. 500. In some cases this military service (*chāḡḡi*) has been commuted for cash payments at the rate of Rs. 201 for a horseman, Rs. 144 for a camel *ḡawāṭi*, and Rs. 81 for a foot-soldier. They have also to pay *ḡul* *inām* or fee on succession, namely seventy-five per cent. of their annual income, but when a son or a grandson succeeds, no *ṛāḡḡ* is levied or service (*chāḡḡi*) is demanded for that year, while if an adopted son or a brother or cousin succeeds, the service or cash payment in lieu is alone exacted. In the matter of succession the rule of primogeniture holds good, and, if there be no son, a successor is appointed by adoption, and must be a lineal male descendant of the original grantee; otherwise the estate reverts to the Darbār. Within this limited area, the adoption of the nearest male relative is more or less obligatory, and, when a choice occurs, it is between those who are equally related. The person adopted is nominated either by the *jāgīrdār* during his lifetime or by his widow within twelve days of his death or, should both have died without having made a selection, by the leading members of the family. At the same time, it should be understood that, strictly speaking, a *jāgīr* estate is granted for a single life only, and, on the death of the holder, immediately becomes *khāṣi* (i.e. reverts to the *ḡisṭ*) and so remains until a successor has been recognised by the Darbār, when it is again conferred and a fresh *ṛāḡḡ* or lease is issued. Disobedience to a lawful summons or order, or the commission of a grave political offence involve sequestration or confiscation, but the latter course is rarely resorted to if there be any practical alternative. Lastly, a *jāgīr* estate cannot be sold, but mortgages are not uncommon, though they cannot be foreclosed.

The *jāgīrdars* of distinction are styled *tāḡmī* Sardārs and number 144, of whom 122 are Rāthors descended from the ruling stock, and the rest belong to other Rājput clans and are known as *Ganāyat*.

The *tāzīmī* Sardārs are divided into three classes according to the degree of recognition which they are entitled to receive from the Mahārājā in *darbār*, and there are at present 86 in the first, 45 in the second, and 13 in the third class. In the first class are twelve nobles (all Rāthors) who are held superior to the rest and are called *Sarāyats*; a list of them will be found in Table No. XXVIII in Vol. III-B.

A *jāgīrdār*, whose estate has been resumed by the Darbār, is usually permitted, in consideration of his previous position and in order to save him from becoming homeless and penniless, to retain a certain portion of it free of rent or tax of any kind; and this tenure is known as *jūna jāgīr*.

Jīvka is a grant to the younger sons of the chief or of a Thākūr for their maintenance. After three generations the holder has to pay cess (*rekh*) and succession fee (*hukmnāma*) and supply militia like the ordinary *jāgīrdār*, and, on failure of lineal descendants of the original grantee, the land reverts to the family of the donor.

When a village is granted in charity to Brāhmans, Chārans, Nāths, etc., it is called *sāsan* and is held rent-free; when, however, the grant is for a portion of a village or certain wells or fields, it is known as *dohāl*. Lands can be given on these tenures only by the Darbār, and, on failure of descendants of the original grantee, they revert to the State; in former days they were sometimes sold, but this practice was stopped by the late Mahārājā. Some of the *jāgīrdārs*, contrary to the wording of their leases, have made grants of this nature, but they are invalid; and, in the event of a *jāgīr* estate becoming *khālsa* they would not be respected by the Darbār.

The *bhūmiās*, or those holding on the *bhūm* tenure, have to perform certain services, such as protecting their villages, following up the tracks of criminals, escorting money and guarding officials while on tour, and some of them pay a quit-rent called *bhīm-bāb*; provided these conditions are satisfied and they conduct themselves peaceably, their lands are not resumed. Grants on the *bhūm* tenure are made only by the Darbār, and can be conferred even in villages held by the *jāgīrdārs*. *Bhūmī-chāra* is the tenure on which the Rājputs, whose ancestors held lands prior to the Rāthor conquest, and the Thākurs of Mallāni enjoy their estates. They pay a small sum of money yearly to the Darbār—fixed from time immemorial and called *farujbal*—and have no further obligations whatsoever. Treason against the State or the commission of a heinous crime can alone justify the resumption of an estate held on either of these tenures, and the position of the *bhūmiās* generally is more important and durable than that of the *jāgīrdārs*.

A tenure known as *dūmba* is found chiefly in Bāli and Desuri, and has sometimes been confused with *bhūm*, but the two are quite distinct. The latter, as already observed, is granted only by the Darbār, but a village can be given in *dūmba* by either the Darbār or a *jāgīrdār*. Lands are made over to be peopled and brought under cultivation and, this having been done, they remain with the holders

in perpetuity so long as they conduct themselves peaceably and pay a permanently fixed-rent; no service is required, nor is any other tax demanded.

Inām is a rent-free grant for services rendered to the State; it lapses on the failure of lineal descendants of the original grantee, and is sometimes given for a single life only. The *ināmdār* cannot sell the land so held by him, but he can mortgage it. *Inām.*

Pasāita is the name of the tenure on which land is given by either the Darbār or a *jāgīrdār* to certain persons in lieu of payment for services which have to be rendered. No tax of any kind is levied, but the grant can be resumed whenever the holders' services cease to be required. *Pasāita.*

Lastly, there are a few villages in the Nāwa district held chiefly by Rājputs on the tenure known as *nānkār*—a word meaning "working for bread." The conditions are much the same as in *jāgīr* estates except that no cess is levied, no service is required, and only succession fee has to be paid. *Nānkār.*

The cultivators in the *khālsa* and *jāgīr* villages may be grouped into two classes, namely *bāpidārs* and *gair-bāpidārs*; the former possess occupancy rights and pay lighter rates than the others, enjoying a concession of about twenty per cent., while the *gair-bāpidārs* are merely tenants at will. The *bāpidār* has been given certain other privileges: *e.g.* (i) standing timber and grass in his field belong to him; (ii) when a new well is sunk, he pays dry rates for ten years if the well be *pakkā* and for five years if it be *kachchā*, and thereafter the usual wet rates; and (iii) if he leave his village under press of famine or for other reasons, he is not deprived of his rights provided he returns within five years. Again, though he cannot permanently alienate his land, he is at liberty to mortgage it with or without possession to tide over a period of distress, but a mortgage with possession confers no right on the mortgagee to have the land cultivated by any other person than the mortgagor. In August 1899, when apprehensions of a terrible famine were entertained, mortgages were very numerous—in accordance with the proverb *Parto kāl ne hoti rānd*, meaning "Famine and widowhood appear terrible at first." *Cultivating tenures.*

In former times the land revenue was paid almost entirely in kind, and there were several modes in which the Darbār's or the *jāgīrdār's* share of the produce was realised. The most prevalent system (and the one most popular with the cultivator) was that known as *lātā* or *batai*, by which the produce was collected near the village and duly measured or weighed. The share taken by the landlord varied from one-fifth to one-half in the case of dry, and from one-sixth to one-third in that of wet crops; it was greater on dry crops because they cost less to cultivate and yielded better and more valuable fodder, of which no share was ordinarily claimed. Another system was *kūnta*, similar to the one just described except that the landlord's portion was not actually weighed or measured but taken by guess or calculation. A third method was *kānkar kūnta* by which the out-turn was estimated while the crops were still standing, and the *System of collection of revenue.*

share was taken either in kind or in cash on the strength of this calculation. Other systems were:—*mukatta*, a fixed rate per field, realised in cash; *dori*, a fixed rate per measured *bigha*, paid in cash or kind; and *ghāgri*, a fixed quantity of grain per well or per field, or a quantity equal in amount to the seed sown (*bīj ghāgri*). These modes of collecting the revenue (particularly *batai*) still prevail in most of the alienated villages, but in the *khālsa* area cash rents are in vogue.

The first and only regular settlement was introduced between 1894 and 1896 (originally for ten years) in 566* of the *khālsa* villages (having an area of 5,775,075 *bighas* or about 3,610 square miles), and is still in force; it is on the *ryotwāri* system, i.e. the Darbār deals directly with the cultivator. As a preliminary measure, a field survey was carried out, village maps and records of rights were prepared, soils were classified, and crop experiments were made; the assessment was based on the most careful calculations of available data extending over some twenty years. The area dealt with was divided into two groups, namely (a) secure or comparatively so, i.e. irrigated from wells, tanks or other sources, where the yearly out-turn varies but slightly, and remissions of revenue are necessary only in seasons of dire famine (*trikāl*); and (b) insecure or solely dependent on the rains, where there is no certainty as to the annual yield. In the former portion the assessment is fixed, and in the latter it fluctuates in proportion to the actual out-turn of the year. With a view to determine rates and their applicability, the districts were subdivided into groups or circles similarly circumstanced, i.e. possessing similar advantages in the matter of soil, climate, position as to markets, facilities for manure, means of irrigation, etc. The basis of the assessment was the old collections in kind with certain *lāgs* (cesses) or, in other words, the amount which the Darbār used to receive whether in cash or in kind; this was taken as the standard, and the gross yield was calculated from the results of crop experiments, supplemented by local enquiries. From these, having due regard to the Darbār's share of the produce and the cesses, the State demand was deduced, and the amount thus obtained was checked by (i) the average revenue of the previous ten years; (ii) the revenue obtained when payments in kind were in vogue (as shown in the old *jamābandis* or rent-rolls); (iii) the opinions of local officers as to the revenue capacity of the holding; and (iv) the sums proposed by the *chaudhris* or headmen of the village.

The rates per acre of wet land vary from Rs. 2-5-6 to Rs. 10 (average Rs. 2-10-6), while those for dry land range from 1½ to 12½ annas and average 4½ annas. Only two cesses are levied, namely *malba* (for village expenses) and *chaudharbāb* (for the remuneration of the *chaudhris*), and they nowhere exceed 4½ per cent. of the revenue demand, while in many cases they amount to only 2½ per cent. The average extent of a holding is reported to be four acres of wet, and twenty-four acres of dry land.

*The present number is 559 villages, occupying an area of 3,527 square miles.

In the 128 *khālśa* villages which have not yet been assessed, the land revenue is collected either according to the *batai* system described above—the Darbār taking a specified portion of the produce—or according to a system known as *ānk-bandī*, under which an estimate of the probable out-turn is made by the Rāj officials and a lump sum (in cash) is fixed for the year.

CHAPTER XIV

MISCELLANEOUS REVENUE.

Some thirty or thirty-five years ago, the poppy appears to have been cultivated on a fairly large scale in some of the sub-montane districts in the east, particularly in the estate of the Thākūr of Raipur, and the crude opium was sent to Pāli, where it was purified and formed into cakes which were either exported to Bombay or consumed in Mārṡār itself. In 1884, however, its cultivation for the manufacture of opium was forbidden, and the area sown has since been quite insignificant.

The opium consumed in the State comes chiefly from Kotah and Udaipur, and the revenue realised by the Darbār is derived from import and transit-duties and vend fees. The import duty was raised from Rs. 26 to Rs. 80 per maund in 1882, to Rs. 100 in 1885, to Rs. 150 in 1891, and to Rs. 200 (the present figure) in 1892; transit-duty is levied only on opium passing through Mārṡār *en route* for Jaisalmer or Sirohi, and amounts to Rs. 5 per maund. The average annual revenue during the eighteen years ending 1900-01 exceeded Rs. 1,70,000, but the actual receipts in 1905-06 were only Rs. 67,074. Under rules issued in 1902, no opium can be exported from, imported into, or sold within the State except by a licensed dealer, and no dealer can sell to any person at one time more than ten tolas unless such person be himself a licensed dealer or has been specially authorised to possess the drug in greater quantities. In 1905-06 there were 894 shops for the sale of opium, and the license-fees brought in as many rupees.

The salt revenue is considerable, amounting to more than fifteen lakhs a year; and practically the whole of this sum is received directly or indirectly from the Government of India under the treaties of 1870 and the agreement of 1879. Directly, the Government pays about eleven lakhs, namely—(a) rent for the lease of certain salt-lakes, Rs. 8,01,000; (b) compensation for losses sustained by the suppression of manufacture and the abolition of duties, Rs. 1,60,395; and (c) royalty on sales exceeding a certain amount, which varies from year to year and may be said to average between Rs. 1,30,000 and Rs. 1,70,000. In addition, the Government delivers annually 24,000 maunds of salt free of all charges and 225,000 maunds at cost price for the use of the Mahārājā and the people, and the sale of this salt usually brings in nearly four lakhs a year. The rest of the revenue is derived from the sale proceeds of *khāri* or earth-salt and license-fees for the manufacture of saltpetre, and averages about Rs. 3,200 a year.

The salt consumed in Mārṡār is of two kinds locally termed *khāri* and *mītha*. The former is used chiefly for industrial purposes

and by the poorer villages round Bilāra, and its manufacture which, under the agreement of 1879, is permitted only at Pichiāk and Māikosni in the Bilāra district, is directly under the control of the Darbār. It is available in three qualities at the rate of R. 1-2, R. 1-10 and Rs. 2-2 per maund respectively; the total out-turn in any one year is restricted to 20,000 maunds, and in 1905-06 amounted to 5,497½ maunds. The *mītha* salt is manufactured by Government at the Sāmbar lake and at Dīdwāna and Pachbhādra; that from the first of these sources, being considered the best, sells at Rs. 2-4 per maund, and the other varieties at Rs. 2-1-6 and Rs. 2-0-9 respectively. These are the rates at which the Darbār sells the salt which it receives from Government, and they represent the selling price at the place of manufacture *plus* a Rāj duty of Rs. 2 per maund; this duty was formerly Rs. 2-8 or, in some cases, Rs. 2-6-6, but, with effect from the 1st April 1903, the Darbār, following the lead of the British Government, reduced it to Rs. 2. The average consumption of *mītha* salt per head is reported to be eight or nine lbs. a year as compared with ten lbs. just twenty years ago.

In former times liquor was either very lightly taxed or not taxed at all, and Mahārājā Bijai Singh (1753—93) forbade its manufacture altogether, but this order was not in force for very long. Excise operations were first undertaken in 1885, but were confined to the capital and conducted by the *Kotwāl*; the tax on distillation of country spirits ranged from one anna to four annas per rupee, and the total receipts amounted to Rs. 1,700. In 1887 operations were extended to the districts with the object chiefly of preventing smuggling into Ajmer-Merwāra, and a separate *ābkāri* department under a Superintendent came into existence. The State was divided into five circles, each under an Inspector with a small staff, and to a board of three directors (two for *jāgīr*, and one for *khālśa* villages) was entrusted the duty of supervising the general working of the department; further, the co-operation of the *tāzīmī jāgīrdārs* was secured by granting them (a) half of the license-fees; (b) the *ābkāri* income formerly realised by them; and (c) the right of setting up a still for the manufacture of liquor intended for their personal consumption. A notification published in May 1887 announced that no still or shop would be considered legal without a license, and that the officials of the department would supervise and inspect the manufacture, test the quality and wholesomeness of the liquor, and regulate and fix the minimum price; lastly, to facilitate the detection of cases of illicit manufacture, a system of rewards to informers was introduced. In 1889 the staff was strengthened by the appointment of two Assistant Superintendents, and the five circles were broken up into thirteen distinct charges, each under an *ahlmad*; in 1893 the posts of directors were abolished, in the following year the operations were extended to hemp drugs, and in 1898 licenses for the sale of European liquor were first granted.

The excise revenue is derived from country spirits, intoxicating drugs and foreign liquor, and amounts to about Rs. 1,03,600 a year or,

Excise.

if the cost of establishment and compensation to *jāgīrdārs* be deducted, Rs. 85,160.

Country liquor is prepared by distillation from the *mahuā* flower, molasses and the bark of the *babūl* tree, and the right of manufacture is sold yearly by auction to the highest bidder, who keeps his still subject to departmental inspection. Fees are also levied for the privilege of sale, and in 1906 there were 124 stills (including those maintained by *jāgīrdārs*) and 160 shops. Three kinds of liquor—*āsa*, *dubāra* and *chhāta*—are manufactured and issued for sale after being tested; the *āsa* was formerly of three qualities, but two more were subsequently introduced, and the strengths of the five varieties now offered for sale are 14°, 22°, 30°, 35° and 40° under proof, the prices per bottle of twenty-four ounces being respectively Rs. 8, Rs. 6, Rs. 5, Rs. 3 and Rs. 1-4. The other kinds of liquor mentioned above sell for from twelve to nine annas per bottle. The average annual income for the ten years ending 1900-01 was approximately Rs. 65,000, while the actual receipts in 1905-06 were Rs. 90,490. There is still room for a further increase in the revenue by the introduction of foreign competition in the excise contract which has for several years been the sole monopoly of local *kalāls*.

The drugs in use are derived from the hemp plant and are known as *bhang* and *gānja*; the right to sell them is also put up to auction and brings in about Rs. 4,000 or Rs. 5,000 a year. In 1906 there were seventy shops for the sale of these drugs, and the retail prices were: *bhang* eight annas, and *gānja* Rs. 4 per seer.

The foreign liquor is entirely of European manufacture, but nothing is known as to the amount imported or sold. The two licensed shops at the capital pay a yearly fee of Rs. 500 each, and are patronised almost exclusively by the local Rājput nobility and a few of the wealthier Mahājans; a third shop was opened at Merta Road in 1903-04, but no license-fee is charged.

The stamp revenue is derived from judicial or court-fee, and non-judicial or revenue stamps; the former are the more important source of income, generally yielding about three-fourths of the receipts. During the decade ending 1900-01, the average annual income was nearly a lakh and the expenditure rather less than Rs. 4,000, while in 1905-06 the receipts amounted to Rs. 90,589 and the expenditure to Rs. 10,580; the last figure, however, represents the cost of the Registration as well as the Stamp department, the two having been amalgamated in 1903. The number of licensed stamp vendors is at present 29, namely two at the capital and twenty-seven in the districts.

Stamp papers were first introduced in 1873 for petitions, bonds and *pattās* (deeds or leases), but, save in the case of the last, their value was not indicated, and the *Hākims* were authorised to note the same on them at the time of sale. Suits of a value not exceeding Rs. 100 were entertainable on four-anna stamp papers, but about a year later, this rule was modified to the extent that suits up to Rs. 50 could be filed on two-anna papers. Court-fees were, as stated at page 134

supra, levied in cash at the time of execution of a money decree from 1874 to 1883, when stamp papers, varying in value from R. 1 to Rs. 1,250, were introduced, as well as an eight-anna paper for petitions and a set of stamps (ranging between one anna and Rs. 50) for bonds and miscellaneous deeds. Stamp regulations were issued in 1886 and amended in 1889, when printed stamp papers took the place of the older lithographed variety. These papers are of seventeen different values (from one anna to Rs. 1,000) and, till May 1903, were printed in four colours, namely red for *rasūm* or court-fees, green for bonds, blue for miscellaneous purposes including petitions, and yellow for the *ābkāri* and Registration departments, but they have since been issued in two colours only—red for court-fees as before and blue for all other purposes—and, with effect from April 1905, the one-anna blue stamp paper has been superseded by an adhesive stamp of the same value.

CHAPTER XV.

LOCAL AND MUNICIPAL.

No municipalities in the true sense of the term, *i. e.* towns possessed of corporate privileges of local self-government, are to be found in the State, but a municipal committee was established at the capital in July 1884. The members are all nominated* by the Darbār from among the leading castes and communities and now number eleven, though formerly there were as many as twenty-eight. The Residency Surgeon was President until 1901, when he was succeeded by the *Kotwāl* (who was formerly Vice-President), and a paid Secretary has always been employed. The committee is entrusted with the sanitary regulation of the city, the settlement of disputes relating to easements such as the construction of private latrines, platforms (*chabūtrās*), doors and windows, and the prevention of encroachments on public thoroughfares; and appeals from its decisions lie to the *Mahakma khās*. The municipal expenditure, about Rs. 20,000 a year, is now borne entirely by the Darbār, but until June 1900 a conservancy cess was levied from all officials residing in the city at the rate of one pie (in the local currency) on every five rupees of their salary.

At the hands of the Darbār and the committee, the sanitary condition of Jodhpur has steadily improved during the last twenty years; several double sets of public latrines and urinals for males and females have been erected at convenient places, and for the *Srīmālī Brāhmans*, who object to the use of latrines, a special plot of ground has been allotted. The elevated site of the city lends itself admirably to natural flushing, and such artificial drainage as exists has been improved by the recent paving of the main streets. For conservancy purposes, Jodhpur and its suburbs are divided into four circles, each served by a corps of sweepers, and a staff of municipal police, thirty-one strong, is employed to prevent the commission of public nuisances.

A tramway line, about $4\frac{1}{2}$ miles in length and constructed in 1897-98, runs round the city, passing all but one of the public latrines; buffalo traction is employed on this section. Twice a day (in the early morning and late at night, so as not to disturb the public), the wagons are loaded with filth and refuse, and collected and formed into trains outside the Sojatia gate, whence they are hauled by steam-power a distance of nearly five miles into the open country where the night-soil is trenched and the rubbish, etc. burnt. In 1898-99 the line was extended up to and round the *Mahārājā's* stables and to the electric power house near the palace (to carry coal), and the total

*It is proposed to introduce the elective system to some extent.

length is now more than thirteen miles, the gauge throughout being 2 feet. The rolling-stock comprises forty wagons of 20 cubic feet, and forty of 25 cubic feet capacity, driven by two 5-inch cylinder locomotive engines. The working of the section round the city and the trenching operations at the terminus are in the hands of the municipal committee, while the portion of the line on which steam-power is used is managed by the Public Works department. The capital cost up to date has been Rs. 25,915, and the working expenses average about Rs. 7,000 a year.

At Pāli a small conservancy establishment has been maintained since 1886-87, the expenditure being met partly from a monthly grant made by the Darbār (Rs. 100 until 1901 and Rs. 50 since) and partly from subscriptions from the leading merchants (about Rs. 25 per month); and a similar establishment is kept up at Bilāra.

Sanitary
arrange-
ments at
Pāli and
Bilāra.

CHAPTER XVI.

PUBLIC WORKS.

A regular Public Works department was first organised in 1883 and consisted of two sections, viz.—(a) railway and (b) general; its head, who has been a European officer from the very beginning, held for twenty-one years the dual office of Manager of the Railway and State Engineer, one-half of his pay and travelling allowances being debited to each section. The subordinate staff of the general branch comprised two overseers, two sub-overseers, two *mistris* and one draughtsman until 1894, when it was strengthened by the addition of an Assistant Engineer, an overseer and a sub-overseer. In August 1904 the two sections were separated; the railway remained under the Manager who, for a time,* looked after the conservancy tramway, the electric light works, the ice and aerated water factories and the water lift (all at the capital), while the general section, i.e. roads, buildings and irrigation works, was placed under a full-time Engineer.

The railway has already been noticed in Chapter VIII *supra*, and it will suffice here to say that the superior staff consists of the Manager, two District Managers, four Assistants, a Loco-Superintendent and an Auditor, and costs the Jodhpur State about Rs. 86,000 a year.

In the general branch the establishment consists of the Engineer, an Assistant Engineer, three supervisors, an overseer, six sub-overseers, and a staff of clerks, and the annual cost is Rs. 29,000.

Excluding the railway and famine relief works carried out under departmental agency, the expenditure on the construction and maintenance of works of public utility during the eighteen years ending 31st March 1905 amounted to more than sixty-eight lakhs of rupees, or an annual average of about 3·8 lakhs, and the establishment charges during the same period exceeded three lakhs, and averaged Rs. 18,000 a year or about 4½ per cent. of the total expenditure. In 1905-06 the actual outlay (railway excluded) was Rs. 3,30,000, namely original works Rs. 2,00,000, repairs Rs. 80,000, miscellaneous Rs. 21,000 and establishment Rs. 29,000; the percentage of establishment on total expenditure was thus nearly nine.

The chief original works carried out during the last twenty-four years have been numerous irrigation and water-supply projects, such as the Bālsamand tank and canals; the Chopāsni tank; the Kailāna reservoir; the Jaswant Sāgar (which, with its distributaries, has cost

* The ice and aerated water factories are now under the Loco-Superintendent of the Jodhpur-Bikaner Railway, and the conservancy tramway, the electric light works, and the water lift under the State Engineer.

up to date more than nine lakhs); the Sardār Samand (cost nearly eight lakhs); the Edward Samand (3·75 lakhs); and tanks at Pāli, Sādri, Chopra, Khārda and Jograwās. Among buildings may be mentioned the public or Jubilee offices, designed by Colonel (now Sir Swinton) Jacob and constructed at a cost of about 4·5 lakhs; the Rātanāda palace with its stables, swimming-bath, electric installation, etc. (approximate cost 3·8 lakhs); the Central jail; the new Residency and several other houses for officials; the palace at Bālsamand; and the Imperial Service cavalry lines.

Practically all the works above enumerated were carried out under the supervision of Mr. Home, whose connection with Jodhpur began in April 1882 and who was for more than twenty-four years the very successful and popular head of the department; his recent retirement from the service is a real loss to the State.

CHAPTER XVII.

ARMY.

The State maintains two regiments of Imperial Service lancers (normal strength 1,210) and a local force consisting of about 250 gunners and 1,240 infantry, or a total of 2,700 men. In 1905-06 the troops numbered 2,243 of all ranks—both Imperial Service regiments having been below strength—and cost the Darbār about 6·6 lakhs. There are 121 guns of various kinds, of which sixty (namely forty-three field-pieces and seventeen mounted in forts) are reported to be serviceable. In addition, the irregular militia supplied by the *jāgīrdārs* mustered 1,851 in 1905-06, namely 1,646 mounted men and 205 foot-soldiers.

The Imperial Service troops represent the contribution of the State towards the defence of the Empire; they were raised between 1889 and 1893, and are called the *Sardār Risāla* after the present chief. The total cost of maintaining these regiments during the sixteen years ending March 1905 was about 75 lakhs, or an average of nearly 4½ lakhs per annum, but they have been considerably below strength for some time, and the yearly expenditure is now ordinarily less than four lakhs. In 1905-06, when the corps numbered 750 of all ranks (33 officers, 115 non-commissioned officers and 602 men), the actual cost was Rs. 4,82,996, but this sum included compensation for dearness of fodder and grain, as well as certain arrears of pay. In the previous year, when the total strength was 742, the cost was Rs. 3,20,489. The officers, *kot-dāffadārs*, farrier major and trumpeters are armed with revolvers and swords, and the *dāffadārs*, farriers and *sowārs* with carbines, lances and swords; the revolvers and carbines are supplied by Government. The men are for the most part Rājputs of the ruling clan or Kaimkhānis, and are well mounted, chiefly on Arabs; transport is complete for one regiment.

In 1895-96 two squadrons were deputed to the Sind border to prevent certain Muhammadan outlaws known as Hūrs from entering Mārwar, while in 1897-98 the first regiment formed part of the reserve brigade of the Tirāh Field Force, two detachments employed on convoy duty doing well and gaining eighty-nine silver and sixty-seven bronze medals. In 1899-1900, in addition to the sixteen picked horses presented by the Mahārājā, 194 horses were despatched to the Transvaal under the care of eight non-commissioned officers, eleven men and fifty-five syces who returned in June 1902, the services of one *dāffadār* having attracted special notice. In 1899 the first regiment was moved to Muttra and proceeded thence in August 1900 to China, where it was well reported on and was largely represented in the expedition to the Laushān hill and Chinansai; it returned a year later, having earned 576 silver and 333 bronze medals, and was

subsequently permitted to bear on its colours and appointments the honorary distinction "China 1900." In 1902 the Government of India showed its further appreciation of the services rendered by presenting four Chinese guns to the Mahārājā, who had become Colonel-in-chief of the two regiments at the beginning of that year. As a reserve police, the corps has been thrice called on to assist the local civil authorities in the suppression of crime, namely in 1899-1900, 1902 and 1903, and on the last of these occasions a party of fifteen men had an encounter with dacoits in the Sānkra district, killing six and wounding and capturing four of them.

The local force needs no lengthy notice; it formerly consisted of irregulars (all foot-soldiers) and regulars (artillery, cavalry and infantry), but the former were of no military value whatever and were disbanded in 1893. The strength of the regular troops varied considerably from year to year, but the average annual expenditure was about three lakhs; the men (with the exception of the gunners) were employed on military or police duties as occasion demanded, and were located partly at the capital and partly in the districts. In 1905 the cavalry and some of the infantry were transferred to the police force, which was then constituted, and the regular army has since been made up of artillery and infantry, costing about 1·8 lakhs a year. In September 1906 the artillery numbered 248 of all ranks (two officers, thirty-two non-commissioned officers and 214 men), but its reorganisation is under consideration. The strength of the infantry in the above month was 1,239, namely thirty-one officers, 134 non-commissioned officers and 1,074 men; the latter are armed with muzzle-loading muskets or carbines and bayonets, and sometimes with swords.

Local force.

The *jāgīr* militia is a mixed contingent of horsemen, camel *sowārs* and footmen supplied by the *jāgīrdārs* under the old feudal system, and is of a very low standard; the mounted men are armed with matchlocks and the foot-soldiers with swords, and both branches are used as part of the police or as official messengers and postal escorts. The nominal strength of the force is 3,680 mounted, and 452 unmounted men, but the services of 1,335 of the former and 148 of the latter have been excused on payment by the *jāgīrdārs* of a fixed sum of money annually—see page 145 *supra*—and the number to which the Darbār is entitled is consequently 2,619, namely 2,315 *sowārs* and 304 footmen. The actual number supplied during recent years has ranged between 1,100 in 1899-1900 and 2,478 in 1894-95, and the annual average may be put at about 1,800.

Jāgīr militia.

There are no cantonments in the State, and the only regiment of the Indian Army that has a detachment in this territory is the 44th Merwāra Infantry, which sends a small guard to the Salt department treasury at the town of Sāmbhar. The Darbār, however, contributes a sum of Rs. 1,15,000 yearly towards the cost of the 43rd (Erinpura) Regiment as explained at page 72 *supra*.

Troops of the Indian Army.

* It has been withdrawn since November 1906.

CHAPTER XVIII.

POLICE AND JAILS.

Police duties were till quite recently performed solely by the local troops (excluding the artillery) and the *jāgīr* militia described in the last chapter, and the work generally was far from satisfactory. In 1885, with a view to secure the efficient detection and regular registration of crime, a special department, known as the *Mahakma girai* was established and placed under an Inspector from Ajmer, and matters improved for a time; but the organisation of a military *corps d'élite* (the Imperial Service regiments) rather distracted attention from the police, the strength of which was in some districts allowed to fall lower than was compatible with the proper discharge of its duties. The local infantry was strengthened between 1893 and 1896, but the force as a whole failed to show to any great advantage, continuing to work almost entirely through informers, and from 1897 onwards was usually described as inefficient and to some extent insufficient. To remedy this state of affairs, the Darbār decided to have a complete reorganisation and, with this end in view, secured (in 1904) the services of an Inspector from the Punjab.

The working out of the scheme naturally took some time, but a regular police force was constituted in August 1905; it consists at present of an Inspector-General, five District Superintendents, two Assistant Superintendents, nineteen Inspectors, seventy-nine sub-inspectors, forty-one *havildārs*, 111 *naiks*, 415 mounted constables (including 200 furnished by the *jāgīrdārs*), and 1,144 unmounted constables, besides seventy-one *pagīs* (trackers), clerks, and menial establishment. The existing strength is 1,990 of all ranks, or one man for about every eighteen square miles of territory and every 972 inhabitants, and the annual cost is nearly 2·2 lakhs. Uniforms are provided free of cost (as a first issue) to all members of the force up to and including sub-inspectors, and the arms carried are old muzzle-loading muskets. For police purposes the country is divided into four districts (each under a Superintendent) and fifteen circles (each under an Inspector), and there are altogether seventy *thāmas* (police stations) and 123 outposts (*chawkis*). A reserve of one hundred men, including recruits under instruction, is maintained at the capital ready to be sent on duty as occasion may require. Enlistment is confined as far as possible to subjects of the State, irrespective of caste and creed, and all recruits, except such as may already be in the service of the Darbār, have to be between the ages of eighteen and twenty-five and at least 5 feet 3 inches in height.

The force above described has jurisdiction throughout Mārwar except in the estates of certain Thākurs, who have been allowed for the present to retain some of their police powers. For example, they

are held responsible for the detection and investigation of all offences other than heinous crimes, such as murder, dacoity, highway robbery, etc., committed within their respective estates, and they have to keep registers and records which are open to the periodical inspection of the District Superintendent. Cases of heinous crime occurring in their villages are dealt with by the State police.

The Darbār maintains no village police, but in some places *charukidārs*—usually members of the criminal tribes—are employed and paid by the inhabitants. The remuneration they receive is termed *lāg-bāg*, and the scale varies considerably in different localities; the agriculturists pay it in kind, while others contribute small sums in cash on ceremonial occasions. In return, the *charukidārs* have to work as trackers and report crime and make good the value of all stolen property proved to have been lost owing to their negligence. In 1905-06 the *lāg-bāg*, or watch and ward cess, was levied in 1,602 villages in fifteen districts, and the collections amounted to Rs. 70,519 (as compared with Rs. 79,567 in the previous year); compensation to the extent of Rs. 1,286 was awarded in sixty-nine cases of theft in 1905-06 against Rs. 2,128 in 103 cases in 1904-05.

Village police.

As observed in Chapter VIII, the State is traversed by two railways, the Rājputāna-Mālwa and the Jodhpur-Bikaner systems. The former has its own police force, belonging to the Bombay* establishment and under the orders of the Inspector-General of Police of that Presidency, and attached to it—in order to facilitate the elucidation of crime and bring about the speedy arrest of offenders taking refuge within the limits of Mārwar—is a Darbār Vakil who, when cases occur, communicates direct with the Superintendent of the Railway Police and the State officials concerned. On the Jodhpur-Bikaner line, police duties are performed by a small force maintained by the Darbār at an annual cost of about Rs. 6,700, and consisting of an Inspector, six head-constables, thirty-four constables and a couple of clerks; but the Mahārājā agreed in 1900 to cede full jurisdiction to the British Government, and arrangements for taking it over are now in progress.

Railway police.

Statistics relating to the working of the State police are only available for the last three years. In 1903-04 cognisable cases numbered 8,096, and of 2,847 persons who were arrested, 2,137 were sent up for trial and 1,403 were convicted; the percentage of those convicted to those arrested was thus 49·3, and to those sent for trial 65·6. In the following year, the number of cognisable cases fell to 7,206, of arrests to 2,826, of persons sent for trial to 2,125, and of convictions to 1,337; similarly, the percentages of convictions fell to 47·3 and 62·9 respectively. The figures for 1905-06 were:—cognisable cases 4,056; accused arrested 3,692; sent up for trial 2,892; convicted 1,675; percentage of convictions to (a) arrests 45·4; and to (b) number sent for trial 57·9. In the matter of recovering stolen property the police appears to have been fairly success-

Working of State police.

* A change is imminent; the control of the force is about to be transferred to the Governor General's Agent in Rājputāna.

ful, having, it is said, recovered eighteen per cent. in 1903-04, nearly twenty-one in 1904-05, and more than twenty-two in 1905-06.

As regards the more heinous crimes coming within the scope of the old Thagi and Dacoity department, it may be noted that, during the twenty years ending 1903-04, 777 dacoities and 1,664 highway robberies were reported, or an annual average for each class of crime of about thirty-nine and eighty-three respectively. The former average was exceeded only in the four years ending 1902-03 when dacoities were very numerous—in fact, nearly half as many again as occurred in all the other years put together; similarly, the latter average was exceeded in 1891-92 and in the four years ending 1903-04, the number reported during these five years forming two-fifths of the total for the whole period. In 1905-06 (a year of scarcity) 35 dacoities and 126 highway robberies are said to have occurred, and of ninety-eight persons apprehended, forty-seven were convicted, fifty acquitted or discharged, and one was declared to be insane.

For the reclamation of the criminal tribes, a special department, called *Mahakma Baoriān* or *jarāyam-pesha*, was established in 1882 and started work on a population which had just been deprived of its arms and conveyances by the late Mahārājā. The object in view was to make honest livelihood a possibility to these people (i) by giving them land at very low rates and settling them down to agricultural pursuits; (ii) by drafting the children of the settled population, when of a suitable age, to the capital and other large centres to be trained in handicrafts and the acquisition of peaceable habits; and (iii) by keeping under surveillance in defined areas those who declined to accept these easy conditions of life, and by punishing those who absented themselves without leave. The department, which consisted of a number of *girdāwars*, *jemadārs* and *lambardārs*, was at one time under the Revenue Superintendent and at another under the Secretary to the *Musāhib Ala* (or chief minister), but in 1894-95 the charge of the operations was made over to a separate and full-time Superintendent who was given two Assistants, one to look after discipline and conduct and the other to arrange for the provision of land. About the same time an improvement was effected by dividing the settled population into two classes—A and B, the former comprising the wilder, and the latter the better behaved—and by providing for the transfer of individuals from one class to the other according to their behaviour and progress. The system then introduced has since undergone little modification except that the strength of the executive and clerical establishments has varied from time to time, and the operations have been supervised by the Inspector-General since August 1905.

Rules regulating the work of the department were first drawn up in 1885 and finally issued in 1890; annual reports have been published since 1889-90. The number of settlements or colonies has ranged between three and six, but since 1899 there have been four, namely at Dūdor, Jaswantābād, Sādri and Sojat *Takāvi*

advances, amounting ordinarily to Rs. 4,000 or Rs. 5,000 a year, are regularly made and, owing to recent unfavourable seasons, the amount outstanding against the criminal tribes is at present rather more than a lakh and a half, besides some 5,500 maunds of grain.

For the purpose of showing what population has been under the management of the department, the year 1896-97, in which the revised system of registration was completed, is a convenient line of demarcation. During the twelve years ending March 1896 the average number of persons under control was 76,765, and of these, thirty-one per cent. represented the male adult population, while the rest were dependents; during the succeeding nine years the number under control, *i.e.* in class A, has averaged about 20,000, thirty per cent. being adult males. The result of the classification was that from 1896-97 the A group was made up almost entirely of Baoris and Sānsias, the only other tribes found in it being a few Bhils and Minās (who together formed but 2·4 per cent. of the total) and a single Koli. In the first of the periods above mentioned the number under management increased steadily from 36,382 in 1884-85 to 102,095 in 1895-96, while during the succeeding nine years it ranged between 21,801 in 1898-99 and 18,537 in 1902-03. In the first period, again, an average of 17,953 persons (or seventy-five per cent. of the adult male population) held between them more than 384,000 *bighas* of land or about 8½ acres per head; whereas in the second period an average of 5,900 persons (or ninety-eight per cent. of the adult males) held between them about 171,500 *bighas* or more than 11½ acres per head.

The tribes classed as criminal in Mārwar numbered 96,211 at the last census, namely the Bhils 37,697 (most numerous in Mallāni, Jaswantpura, Sānchor and Jālor); the Minās 24,610 (found chiefly in Jālor, Bāli, Jodhpur and Desuri); the Baoris 24,306 (principally in Merta, Nāgaur, Jaitāran and Bilāra); the Bāgris 5,701 (in Jālor and Jaswantpura); the Sānsias 3,091 (in Nāgaur, Mallāni and Merta); the Kanjars 490; and the Kolis (in Sānchor only) 316. There are said to be a few Thoris in Jaitāran and Sojat, but none were enumerated as such in 1901. The number of men, women and children borne on the register in class A in 1906 was 19,395, namely 18,804 Baoris, 485 Sānsias, 57 Bhils, 48 Minās and one Koli, and of the above, 6,028 were adult males, of whom 5,005 were actually present on the 30th September 1906; the latter are said to possess between them about 71,519 acres of land and 14,452 cattle, or about fourteen acres and nearly three head of cattle each. Bad characters, *i.e.* those who have been punished more than once, numbered 896 (873 Baoris, 12 Bhils, 10 Sānsias and one Koli) and of the registered population, ninety-eight were convicted of theft, but none of highway robbery and dacoity in 1905-06. It would seem that the people are not badly off as regards lands and plough-cattle, and are on the whole fairly well-behaved.

The conditions under which prisoners live have been greatly meliorated during the last thirty years. In 1873 the Jodhpur Jails.

jail was a part of the *kotwālī*, situated in the heart of the city, and was described as small, badly ventilated and totally unfit for a large number of convicts, and as containing "a crowded, if not happy, family of human beings, dogs, cats, pigeons and rats, wallowing in the dirt." This reproach was removed in the following year, when a large octagonal building, situated about a thousand yards outside the Sojatia gate of the city and originally intended for stables, was converted into a prison at a cost of some Rs. 20,000; a Superintendent was appointed, certain industries were started, cook-houses and latrines were provided, and water for drinking and washing purposes was obtained from a well sunk close by. In 1884 a small vegetable garden was added, and the system of recovering the cost of their food from the prisoners was abolished at a sacrifice to the Darbār of about Rs. 10,000 annually, while four years later, the use of the iron *bel* chain, which passed through the top ring of the fetters of all the inmates of each dormitory, was discontinued. This was followed by the prohibition of smoking, the establishment of a factory (thus releasing two wards) and the opening of a subsidiary prison in the city, but the need of a larger building soon began to be felt, and the present Central jail was accordingly erected between 1890 and 1894 at a cost of more than a lakh of rupees, the prisoners being transferred thereto on the 25th March 1894.

This jail has accommodation for 862 persons (788 males and 74 females) and, as a building, is one of the finest in Rājputāna, being well situated, constructed and ventilated: it possesses separate wards for under-trial and female prisoners, cook-houses, store-rooms, a hospital, and the other necessary adjuncts of the modern prison, and is connected with the Balsamand reservoir by pipes which supply it with excellent drinking water. The accommodation provided was ample for the first two years but has since proved inadequate; the average daily population having exceeded 862 in ten of the last eleven years and having been as high as 1,163 in 1902; overcrowding is, however, avoided as far as possible by utilising the old jail which is in the vicinity. The general health of the prisoners has been very good except in 1899 and 1900, when many suffered from debility caused by the famine and deaths numbered 48 and 126 respectively (thirty-eight of the latter being due to an outbreak of cholera); the death-rate per mille of average strength was 53 in 1899 and nearly 118 in 1900, but in the following years has only once exceeded twenty and in 1904 was as low as 8.5, namely nine deaths among a daily average population of 1,052. The institution is under the direct control of the *Mahakmā khās*, which is advised in medical and sanitary matters by the Residency Surgeon; the average annual expenditure during the last ten years has been about Rs. 46,000, and has ranged between Rs. 34,100 in 1895-96 and Rs. 67,500 in 1899-1900. Similarly, the cost of maintaining each prisoner was nearly Rs. 66 in the year last mentioned and Rs. 35 in 1904-05. The convicts are employed chiefly in mending roads, repairing the polo-grounds and working in gardens, though a few weave coarse rugs,

blankets, dusters, etc.; much more might be done in teaching them an employment which would be useful to them on their release, and the subject is receiving attention. As matters stand, the profits from manufactures are quite insignificant, averaging Rs. 1,300 a year. Some further particulars regarding the Central jail will be found in Table No. XXIX in Vol. III-B.

Besides the jails at the capital, small prisons are maintained at the headquarters of each district, in which persons sentenced to three months or less are confined; and each *thāna* or police station has its lockup for under-trial prisoners.

Other
prisons.

CHAPTER XIX.

EDUCATION.

At the last census 104,841 persons, or 5·4 per cent. of the people—namely 10 per cent. of the males and 0·3 of the females—were returned as able to read and write; thus, in regard to the literacy of its population, Jodhpur stood second among the twenty States and chiefships of Rājputāna. Of the three main religions, the Jains were easily first with 235 persons in every thousand of their community literate, and were followed by the Hindus with 41 and the Musalmāns with nearly 40; but while the proportion of literacy, as between the sexes, was two females to fifty-nine males for all religions and as high as one female to sixteen males among the Muham-madans, it was only one to forty-six among the Jains and one to twenty-nine among the Hindus. Again, of the total number of persons able to read and write, 3,909 or about thirty-seven per mille were literate in English; the similar proportions for the three religions were:—Musalmāns fifty-six, Hindus forty-one and Jains nearly twenty-one, the highest figures for the Musalmāns and the lowest for the Jains being specially noticeable. Lastly, if we exclude Christians and Pārsis, only four females were literate in English, and all were Hindus.

In former days, the Darbār took no interest in education, and the chiefs and nobles, as a rule, considered reading and writing as beneath their dignity and as arts which they paid their servants to perform for them; schools were, of course, to be found but were private institutions of the indigenous type, such as Hindu *posāls* or *pāthshālas* and Musalmān *maktabs*, in which reading, writing and a little simple arithmetic were taught. The earliest public institutions were apparently a couple of vernacular schools (at Jasol and Bārmer) in the Mallāni district; it is not known when they were first opened, but they were attended by about one hundred boys in 1868 and were maintained from a special fund under the control of the Political Agent. In the following year, the Darbār established an anglo-vernacular school (which soon developed into a high school) and a Hindī *pāthshāla*—both at the capital—while in 1870 vernacular schools were opened at the headquarters of nine districts. An anglo-vernacular school was started at Pāli in 1873; a branch of the high school at the capital in 1875—when also two schools for the sons of Thākurs (the first of their kind in Rājputāna) came into existence—and Sānehor got a vernacular school in 1880. In this way, the State institutions (including two in Mallāni) numbered eighteen in 1881-82, namely one high school, two anglo-vernacular (primary), thirteen vernacular, and two special schools, and the cost of maintenance was about Rs. 10,000.

So matters remained until 1886-87, when the important towns of Jālor, Merta, Nāgaur, Phalodi and Sojat were provided with anglo-vernacular schools, and vernacular institutions were established at eight other places, including three in Mallāni (namely at Chhotan, Gūrha and Sindari). The same year witnessed the opening at the capital of a girls' school (called after Mr. Hewson, who was guardian to the present Mahārājā and had died in August 1886) and a Sanskrit school, as well as the amalgamation of the two special schools (above mentioned) into one institution styled the Powlett Nobles' school after the officer who was then Resident. The only other school made during this decade was the starting in 1891 of a class at the high school for teaching the boys telegraphy and qualifying them for employment on the Jodhpur-Bikaner Railway. Thus the number of State institutions (including five in Mallāni) had increased to thirty-two in 1891-92, namely one high school (with a special class for telegraphy), seven anglo-vernacular primary schools, twenty-one vernacular, one girls' school, and two special institutions (one for Sanskrit and the other the Nobles' school). Omitting the Mallāni schools—for which figures are not available—the number of pupils on the rolls at the end of the above year was 1,665, and the daily average attendance was 1,057 including forty-four girls, while the expenditure amounted to about Rs. 21,000.

Progress
during
1882-92.

In 1893 a college, named after the late Mahārājā "the Jaswant College," was established and, having been affiliated to the Allahābād University up to the Intermediate standard in the same year and up to the B.A. standard in 1898, it sent its first batch of candidates for the Intermediate examination in 1895 and for graduation in 1899. A surveying class, similar to the overseer class at the Roorkee College, was started in 1896 for the purpose of training youths for service in the Public Works department, but it was never very popular and was abolished in 1904. The vernacular school at Sindari in Mallāni was closed about this time as the *jāgirdārs* withdrew their subscriptions, but, on the other hand, an institution, founded in the interests of the poorer Rājputs and called after the Earl of Elgin, then Viceroy of India, was established at Mandor (near the capital) in 1896 and amalgamated with the Powlett Nobles' school three years later. Lastly, anglo-vernacular schools were opened at Khārchī (Mārwar Junction) and Bālotra in 1896 and 1898 respectively, and the teaching of English was started at the Nāwa school in 1897. Consequently the State institutions (including four in Mallāni) numbered thirty-four in 1901-02, namely the college (with a surveying class), the high school (with a class for instruction in telegraphy), ten anglo-vernacular primary and nineteen vernacular schools, one girls' school, and two special schools. Omitting, as before, the Mallāni schools, from which no returns were received, the number of boys and girls on the rolls at the end of the above year was 1,718, and the daily average attendance was 1,321, of whom fifty were girls; the total expenditure was Rs. 37,000.

Progress
during
1892-1902.

The changes since effected may be briefly noticed. In 1902-03 the Elgin Rājput school (formerly under an official who was indepen-

Progress
since 1902.

rolls was 3,128, of whom ninety-three were girls, and the daily average attendance during the *six* months (April to September 1906) was 2,474, including seventy-eight girls; the expenditure during the same period exceeded Rs. 26,000.

Of the 212 private schools, no less than 186 were what are known as *Mārwārī posāls*, conducted by *gurūs* who are expected to teach the boys just as much Hindī and arithmetic as will answer the requirements of business; the teaching is on the old lines, no books or writing materials being used and no attempts being made to rank the scholars into classes or forms according to age or proficiency. The number of boys receiving instruction at *posāls* was reported to be 7,387, and twelve of these institutions have received grants-in-aid from the State since 1906. At ten schools kept up by individual Muhammadans or by this community generally the chief study is Urdu, taught by a *maulvi* who, if well-versed in his scriptures, becomes the centre of a large circle of disciples taking lessons in the recitation of the Korān. Instruction is also sometimes given in Arabic and Persian, notably at the *Islāmīa madrasa* at the capital, which is attached to a mosque and has been assisted by the Darbār since 1904. The anglo-vernacular school at Pokaran and the vernacular one at Raipur deserve special mention as being the only educational institutions maintained by the Thākurs of Mārwār. The most important of the private schools are, however, to be found at Jodhpur city, *viz.*—(i) the Sardār school, established in 1896 and maintained by the Oswāl Mahājans; (ii) the anglo-vedic *pāthshālā*, which dates from 1897 and is supported by the Srimāli Brāhmans; (iii) the Sumer school, started by the Māli community in 1898 and called after the Mahārāj Knnwar; and (iv) the Sir Pratāp school, founded in 1887 as a memorial of the visit of Sir Pratāp Singh (now Mahārājā of Idar) to England on the occasion of the jubilee of Her late Majesty, and kept up by the Pancholis. The first is a lower secondary, and the other three are primary anglo-vernacular schools, but all follow the course of instruction prescribed by the department and have more or less intermittently served as feeders of the upper classes of the high school. The Vedic *pāthshālā*, established in 1890, is another institution supported by the Srimāli Brāhmans, and is entirely devoted to the teaching of Sanskrit; it has presented candidates for the Jaipur College examinations since 1896 and the oriental title examinations of the Punjab University since 1898, and was particularly successful in 1902, when one student headed the list and another occupied the sixth place. All these five schools received substantial contributions from the State when they were started, and the one last mentioned has throughout its existence been the regular recipient of a monthly sum. The Darbār extended the grant-in-aid system to the Sardār and Sumer schools (as well as the *Islāmīa madrasa* already noticed) in 1904. Lastly, the United Free Church of Scotland Mission has had a small school for girls at the capital since 1902.

Private
schools.

Particulars as to the castes of the scholars are available only for the State institutions, and Brāhmans and Mahājans predominate. Castes of students.

In the anglo-vernacular schools they are almost equally represented, the percentages being 26·2 and 27·1 respectively; the largest proportion of the former is shown by the schools at Merta town (46·5) and Phalodi (45·7) and the branch school at the capital (35); and of the latter by the institutions at Phalodi (40·2), Jālor (38·8), Bālotra (38·2) and Sojat (35·9). Jodhpur city shows a low percentage of only 5·9 for the Mahājans, the reason being that most of the boys attend either the Sardār school (set up by their caste) or one of the *posāls*. The trading sections of this community place very little value on school training, and even regard it with suspicion as a sure dissolvent of established customs and beliefs; they are generally content with a little knowledge of the vernacular and the native system of arithmetic and accounts for their sons, and if a smattering of English is sometimes thought desirable, it is because telegrams play an important part in business in these days. The *mutasaddī* or official sections of the Mahājans, on the other hand, find that their hereditary claims to Rāj service count less and less, and educational qualifications more and more, when the question of filling up some vacant post arises, so they have responded to the virtue of necessity, but only because it gives them the means of livelihood. It is they who started the Sardār school on the principle of self-help to fortify their position against competing communities; their old learning, which was of the *munshiāna* kind—special to the writer's profession rather than academic—is no longer of much use to them, and they are actively superseding it by an English school education. Musalmān scholars formed 17·6 per cent. of the total attending the anglo-vernacular schools, the institution at Merta Road leading with 39 per cent., but the Rājputs of pure blood still hold aloof, and the few that were found were mostly of the pseudo-Rājput class. The percentage of the Kāyasths or Pancholis is also small—namely 8·2—and this is due, so far as Jodhpur city is concerned, to the existence for several years of a separate caste school (the Sir Pratāp institute).

In the vernacular schools Mahājans are most numerous with 44 per cent., and are followed by the Rājputs (mostly of pure blood) with 27·5, the Brāhmins with 18·6, the Musalmāns with 9·5, and the Kāyasths with four per cent. of the total number of scholars. It would thus appear that, as between anglo-vernacular and vernacular education, the Brāhmins, Kāyasths and Musalmāns go in more largely for the former than for the latter, the proportionate ratios being nearly 3:2 for the Brāhmins and almost 2:1 for the others, while that for the Mahājans (3:5) shows how averse they are to English education in comparison with the other communities. Without distinction between anglo-vernacular and vernacular, the percentages are:—Mahājans 37·3, Brāhmins 21·6, Musalmāns 12·7, and Kāyasths 5·8.

In the above calculations, the primary section of the high school has been left out of account because the proportions according to castes are not available for each section separately, except that the Musalmāns formed just one-tenth of those in the primary grade. Of

the total strength of the school, including lower and upper secondary sections, Brāhmins formed 46·5 per cent., Mahājans and Kāyasths ten per cent. each, and Musalmāns nine. The high proportion of Brāhmins in the premier school of the State shows how far in advance they are of the other communities in appreciating the value of English education, and this is due partly to the maintenance of their "monopoly of learning as the chief buttress of their social supremacy" being a prime necessity as a means of livelihood, and partly because the change from the old to the present system of education is to them comparatively easy. It is the Brāhmins also who swell the ranks of scholars at the Jaswant College, forming more than fifty-seven per cent. of the total, while the Kāyasths, Mahājans and Musalmāns are represented by 18·3, 8·6 and 0·5 per cent. respectively.

Fees.

With but one exception in each case, education at all the State and private institutions is free. At Merta Road a fee of two annas a month is charged if the monthly pay of the boy's parent is between Rs. 5 and Rs. 10, and of four annas if it exceeds Rs. 10, but otherwise nothing is levied. At the high school, youths absenting themselves for more than a month without sufficient reason have had, since 1902, to pay a fine of one rupee on re-admission. Among the aided schools, a nominal fee is taken from non-Srīmāli students who attend the Vedic *pāthshālā*.

Successes
at public
examina-
tions.

It only remains to notice the successes obtained at public examinations. The Jaswant College, since it was established in August 1893, has passed fourteen students for the degree of B.A. and forty in the Intermediate or First Arts examination. The high school has since 1876 passed nineteen boys for the Entrance examination of the Calcutta University and fifty-six for that of the Allahābād University, as well as sixty-eight boys for the middle English examination of the United Provinces till 1902, and of Rājputāna since.

Newspapers.

The only newspaper published in Jodhpur is the Mārūr Gazette, which has appeared weekly since about 1867-68; it is printed at the State press at the capital, and consists of some eight pages, in English and Hindī, giving a brief account of notable local events, the text of the more important notifications issued by the Darbār, and some extracts from vernacular papers. About two hundred copies are usually issued.

CHAPTER XX.

MEDICAL.

As in other parts of Rājputāna, the practice of medicine was, in former times, mostly in the hands of Baidis or Vaidyas (Hindu physicians) and *hakīms* (Muhammadan doctors, chiefly of the Yūnāni school); very few of them were educated, and they knew little of anatomy, and nothing of modern pathology. These men continue to flourish to some extent, and a few are still employed by the Darbār at its medical hall—an institution attached to the palace and having no connection with the State Medical department. The surgeons of olden days were chiefly of the barber class, though amputations were not infrequently performed by Rājput swordsmen who, if they were expert, would cut through the limb with one stroke, the stump being then placed in boiling oil to prevent hæmorrhage. Lastly, there were the Sāthias who practised couching for cataract and still have a great reputation, particularly those of Sojat.

The first medical institution, established in Jodhpur on modern lines, dates from 1853; it consisted of a house at the capital, containing quarters for the Hospital Assistant, a small surgery and two rooms for the sick, and was the only hospital in the State till 1865, when one was opened at Pāli. By 1881, there were seven hospitals and three dispensaries, namely the two hospitals above mentioned and others at Jodhpur (attached to the jail), Nāgaur, Didwāna, Pachbhadra and Sāmbhar,—the three last being maintained by the Government of India for the benefit of those employed at the salt-works—while of the dispensaries, one was at Jasol and two at the capital. A reference to Table No. XXXII in Vol. III-B. will show that the number of institutions increased to twenty-two in 1891, thirty-one in 1901, and thirty-two at the present time. Of the last*, twenty-four are maintained by the Darbār, five by the Government of India, and one each by the United Free Church of Scotland Mission, the authorities of the Rājputāna-Mālwa Railway, and the Thākur of Pokaran; again, twenty-five are hospitals, having accommodation for 360 in-patients, and the rest are dispensaries. Complete statistics as to the work done in 1881, 1891 and 1901 are not available, but the popularity of these institutions is clear from the steady increase (a) in the number of cases treated and operations performed, and (b) in the daily average attendance—see Table No. XXXII. For example, the daily average attendance was about 300 in 1881, 1,050 in 1901 and 1,599 in 1906; and the number of patients treated rose from about 21,000 in 1881 to more than 175,000 in 1901 and 210,625 in 1906.

* See Table No. XXXIII in Vol. III-B.

The State hospitals and dispensaries, including that kept up by the Thākūr of Pokaran, are under the supervision of the Residency Surgeon, and are provided with dark rooms for the examination of the eye, ear, throat and nose—the Hospital Assistants having been trained to examine these organs and supplied with special instruments; some of them also possess separate buildings wherein *post-mortem* examinations can be decently conducted. The Darbār spends about Rs. 44,000 a year on its medical institutions, and of this sum about two-thirds represent the pay of the establishment, including allowances to the Residency Surgeon, while the cost of medicines averages nearly Rs. 11,000. In addition, the expenditure on the medical hall, referred to at the beginning of this chapter, is about Rs. 15,000.

Management and expenditure.

The following is a brief account of the more noteworthy institutions, all of which are at the capital :—

Noteworthy institution.

The Hewson Hospital takes its name after the late Mr. Hewson (who came to Jodhpur in 1882, reorganised the Customs department with conspicuous success, and died in 1886) and is situated in the centre of the city; it was opened on the 15th February 1888, when it took the place of the old hospital (noticed above as having been established in 1853), and has since been constantly enlarged so as to become an up-to-date institution with accommodation for seventy-five in-patients (forty-five male and thirty female). It is well stocked with medical stores and appliances, and has two operation rooms—one for general, and the other for ophthalmic surgery—besides a separate department for out-patients, and a ward for women, more especially for the treatment of lying-in cases; the last was added as recently as 1904 and is under the care of a qualified female Hospital Assistant, who also attends to maternity cases at private houses free of charge.

Hewson Hospital.

The Jaswant Hospital was established in memory of the late Mahārājā, and is solely for females; it is located in the city in a building which was originally a palace (the *Taleti-kā-mahal*), and was opened by the Countess of Elgin on the 24th November 1896. Accommodation is provided for fifty in-patients, and the institution has almost continuously been under the management of a qualified lady doctor; much useful work have been done, but the quantity thereof shows a falling off during recent times, namely an annual average of 9,293 cases treated and 631 operations performed during the four years 1897-1900, and of 4,338 cases and 342 operations since. In 1906, 4,381 cases (220 being those of in-patients) were treated and 374 operations were performed, and the cost of maintaining the hospital was Rs. 7,704.

Jaswant Hospital.

The Mission Hospital was opened on the 14th July 1885, and was considerably altered and extended in 1900 at a cost of more than Rs. 30,000, towards which the Darbār contributed about Rs. 17,000; it contains some forty beds and is a popular institution. The missionary in charge and his assistants visit many people at their own houses in and about the city, and sometimes tour in the districts; about 30,000 cases are treated, and 900 operations performed every

Mission Hospital.

year—the expenditure, entirely borne by the Mission, averaging nearly Rs. 2,200.

A portion of the old jail has been used as a lunatic asylum since 1894, and the inmates are looked after and made as comfortable as possible by male and female warders, the sexes being separated. In 1905-06, twenty-four lunatics were treated, of whom five were cured, three were made over to their relatives, and sixteen remained under observation; the asylum being worked as part of the jail, the maintenance charges appear in the accounts of the latter institution. Since 1905 an arrangement has been made with the Government of India by which dangerous lunatics from Rājputāna can at all times be transferred to the asylum at either Lahore or Agra, and of the sixteen shown above as under observation at the end of March 1906, ten were actually at Lahore. Insanity is, however, not very common in Jodhpur, only 460 lunatics (or rather more than two persons in every 10,000) having been enumerated in 1901, and the forms most frequently met with appear to be mania, melancholia and dementia; caused by mental strain and intemperance; idiocy is extremely rare.

At Kāga, one of the suburbs of Jodhpur city, the cenotaphs erected on a cremation ground afforded (till 1905) shelter to a number of lepers who congregated there from the surrounding country and received food from the charitable townsfolk; a regular asylum has since been built at Mandor, and now contains about fifty inmates, all of whom are fed and clothed at the cost of the State. According to the census returns, the disease is on the wane, there having been 534 lepers in 1891 and 246 in 1901, but this decrease of fifty-four per cent., which was most marked among the males, was probably due partly to the famine of 1899-1900 and partly to greater care on the part of the enumerating staff in distinguishing true leprosy from leuoderma and certain skin affections.

Vaccination appears to have been first introduced in Mārwar in 1866 when 3,933 persons were vaccinated—2,225, or more than fifty-six per cent., successfully; the staff, which originally consisted of three operators, was increased to nine (under an Inspector) in 1870, and to eleven in 1875, and these men successfully vaccinated 18,830 persons (or 10·7 per mille of the population) in 1881 at a cost of Rs. 1,709, or an average of seventeen pies per successful case. Four years later, the present Mahārājā was vaccinated, and this greatly increased the popularity of the operations, especially among the upper classes; the Thākurs were induced to keep their own vaccinators, but as this scheme did not work well, they subsequently agreed to contribute towards the cost of the general staff. In this way, ample funds became available, and the number of vaccinators rose gradually from fifty in 1885 to eighty in 1888, while the annual number of successful operations averaged nearly 50,000 during this period. In 1889 the whole system was reorganised; the State was divided into six circles, each under an Assistant Superintendent, the staff of vaccinators was increased to eighty-four (and two years later to eighty-six), and a Deputy Superintendent was appointed. Of the vaccinators, one was

a Brāhman female told off to work among families keeping close *pardā*, while two were sweepers who confined their attentions to the lower castes.

During the next ten years (1890-91 to 1899-1900) operations flourished, and on the average 80,610 persons were successfully vaccinated annually at a cost of Rs. 11,395 or about twenty-seven pies per head; indeed in 1898-99, as many as 89,054 successful operations were performed by eighty-four vaccinators. Since then, the staff has been considerably reduced and less work has been done, the annual average number of successful vaccinations for the five years ending 1904-05 having been 48,269; the annual expenditure for the same period was Rs. 5,220. The establishment employed in 1905-06 consisted of a Deputy Superintendent, an Assistant Superintendent and twenty-one vaccinators, under the control of the Residency Surgeon as Superintendent; in the above year 54,580 persons (or 28·2 per mille of the population) were successfully vaccinated at a cost of Rs. 3,850 or an average of fourteen pies per case. Some further details will be found in Table No. XXXIV.

Vaccination is compulsory, or nominally so, throughout the State, and is on the whole popular except, perhaps, in a few Mīnā villages; it has done much to mitigate the ravages of smallpox, and most of the people now recognise the benefits it confers. Arm-to-arm vaccination was the method in vogue in earlier years, but it has been supplanted by buffalo calf lymph because parents prefer the latter and object to giving lymph from their children to others.

Sale of
quinine.

The system of selling quinine in pice packets at post offices was introduced in January 1895; these packets were at first supplied to postmasters by the Residency Surgeon, but since 1902 have been obtained direct from the Superintendent of the Aligarh jail in the United Provinces. In 1900-01, when there was much malarial fever, 24,480 packets of 5-grain doses were sold, while in 1905-06* only 2,504 packets of 7-grain doses were disposed of.

*4,940 packets in 1906-07.

CHAPTER XXI.

SURVEYS.

The whole State, with the exception of the western portion of Mallāni, was topographically surveyed by the Survey of India, mostly on a scale of one inch to the mile, at different times between 1865 and 1891. The operations of the Great Trigonometrical Survey of India extended to Mārwar in 1872—74, and the territory lies within what is known as the Jodhpur Meridional Series. Lastly, a cadastral survey was carried out by the Darbār with the plane-table between 1883 and 1893, the agency employed being partly local and partly foreign. The area, as calculated at the time of the settlement, was 34,963 square miles. The maps, which are on a scale of one inch to 528 feet or ten inches to the mile, show, for the entire State, the limits of each village as well as hills, rivers, tanks and habitations. In the *khālsa* villages a regular field survey was made, the soils being classified and records of rights prepared, and the maps, etc. relating to this area are kept up to date.

CHAPTER XXII.

MISCELLANEOUS.

✓ **Bāli Hukūmat.**—A district in the south-east of the Jodhpur State, with an area of 837 square miles, of which about one-fourth is *khālsa* (*i. e.* directly under the management of the Darbār). In 1901 it consisted of one town (Bāli) and 160 villages, containing 96,194 inhabitants, of whom seventy-eight per cent. were Hindus and fifteen per cent. Jains; the principal castes were Mahājans (16,230); Rājputs (9,283); Brāhmans (9,050); Jāts (7,456); Balais (7,082); Sirvis (5,232); and Minās (5,023). The district, which is traversed from north-east to south-west by the Rājputāna-Mālwa Railway, is one of the most fertile in the State; wells abound, and barley, cotton and wheat are extensively grown. The yearly receipts from the land (*khālsa*) average about Rs. 57,000. At the village of Bijāpur are the remains of an ancient city called Hathūndi or Hastikūndi, the earliest seat of the Rāthors in Rājputāna. A stone inscription found here bears the date 997 A.D. and tells of five Rāthor Rājās who ruled at this place in the tenth century, namely Harivarman, Vidagdha (916), Mammata (939), Dhavala, and Bālaprasād. Other objects of interest are the Jain temples at Dāntiwāra, Dāyalāna and Khinwal, and the Nīlkanth Mahādeo temple at Nāna, all of which are said to be old and to contain some fine carving, but they have not yet been professionally examined. A step-well in very fair order at Bhadūnda Purohitān possesses an inscription dated 1045 A.D. which mentions some chiefs of the Paramāra clan, and another inscription (of 1762 A. D.) in a well at Khinwal refers to Rānā Ari Singh II of Mewār and some of the Thākurs of Chānod.

The district of Bāli which, with that of Desuri immediately to the north and north-east, forms the tract known as Godwār, was formerly held by the Chauhāns and next by the Rānās of Udaipur; it passed finally into the possession of the Jodhpur chiefs towards the end of the eighteenth century. The principal *jāgīr* estates in Bāli are those of Chānod and Bera, both held by nobles of the second class. The former was conferred by Mahārājā Bijai Singh in 1772 on a Rāthor Rājput of the Mertia sept named Bishan Singh, whose descendant, Gulāb Singh, is the present Thākur; it now consists of twenty-six villages yielding an annual revenue of about Rs. 30,000, out of which a tribute of Rs. 2,480 is paid yearly to the Darbār. The other estate (Bera) was originally granted by one of the Rānās of Udaipur to his kinsman, Shekhojī, a Sesodia of the Rāuāwat sept, and when Godwār passed into the hands of the chiefs of Jodhpur, the Thākur transferred his allegiance to the latter; the present holder, Sheonāth Singh, owns villages worth about Rs. 18,000 a year. but pays no tribute.

Bāli Town.—The headquarters of the district of the same name, situated 1,013 feet above the sea on the left bank of a stream called the Mitri in $25^{\circ} 11' N.$ and $73^{\circ} 18' E.$, about five miles south-east of Fālma station on the Rājputāna-Mālwa Railway. Population (1901) 5,186. The town is walled, and possesses a fort (in good repair), a post office, a vernacular school, two private Mārwarī schools, and a hospital with accommodation for six in-patients. The houses are mostly substantial brick buildings with tiled roofs, the people being generally well-to-do. Two temples are deserving of mention, namely that to Mokāl Mātā, said to have been built by Kumārapāla Chālukya—of whose time it possesses an inscription dated 1159 A.D.—and a Jain temple, the history of which is not known, but it has an inscription of 1187 A.D.; both are in daily use and in a fair state of preservation.

Bilāra Hukūmat.—A district situated in the centre of the eastern half of the Jodhpur State, having an area of 792 square miles of which about one-third is *khālśa*, the rest being held on favoured tenures by *jāgīrdārs* and others. In 1901 it consisted of two towns (Bilāra and Pipār) and eighty-eight villages, containing 57,794 inhabitants, of whom more than eighty-six per cent. were Hindus; the population was found to have decreased by thirty-two per cent. since 1891. The principal castes enumerated at the last census were Jāts (6,762); Brāhmans (5,947); Mahājans (5,924); Rājputs (5,026); Balais (4,048); Mālis (3,143); and Sīrvis (2,733). The river Jojri flows through the centre of the district from the north-east, while the Lūni itself traverses the southern portion and has been dammed near Pichiāk so as to form a fine artificial lake, called the Jaswant Sāgar; further, the soil is productive, water is plentiful, and the tract is among the most favoured in the State. The *khālśa* lands are 264 square miles in extent, and of these, about 210 square miles are available for cultivation; the average annual area cultivated during the last five years has been nearly seventy square miles, of which one-third was irrigated, chiefly from wells. The average areas under the principal crops are approximately in square miles:—*jowār* 17·5; wheat 15; *bājra* 11·3; barley 5; oil-seeds 4·5; and cotton 2·3; gram, maize, *manduā* and tobacco are also grown. The land revenue of the district (*khālśa* portion) is about Rs. 1,54,000 yearly. The manufacture of an inferior kind of salt called *khāri* which, in former days, gave employment to a large number of people, is now, under the agreement of 1879 between the Darbār and the Government of India, only permitted at the depressions at Pichiāk and Mālkosni, and the out-turn in any one year is restricted to 20,000 maunds—a figure which is seldom approached.

The principal *jāgīr* estates in Bilāra are Khejarla and Sāthin, held by Bhāti Rājputs who are nobles of the second class. Khejarla was first granted by Mahārājā Mān Singh to one Gopāl Dās in 1803, and the name of the present Thākur is Nādhō Singh; the estate now comprises eight villages yielding about Rs. 24,000 annually, and the tribute payable to the Darbār is Rs. 1,984. The Sāthin estate is

very similar in every way, having been conferred on Sakti Dān by Mahārājā Mān Singh in 1803, and now consisting of eight villages worth about Rs. 21,000 a year, for which the present holder, Thākur Mohan Singh, pays an annual tribute of Rs. 1,728 to the Darbār.

Among places of archaeological interest, besides Pipār, are Kāpardā and Buchkalā. The former has a Jain temple which, though it cannot claim to have been constructed prior to the sixteenth century, is of unusual height inasmuch as it can be seen from a distance of five miles. In the village of Buchkalā will be found two temples, one to Mahādeo and the other to Pārbatī, but, while the first is in the better state of repair, the other is not only more interesting to the architect but is important as possessing on one of its pillars an inscription which refers itself to the rule of one Nāgabbatta, son of Vatsarāja, and is dated 815 A.D.

Bilāra Town.—The headquarters of the district of the same name, situated on the left bank of a river called the Raipur Lūni (a tributary of the Lūni) in $26^{\circ} 11' N.$ and $73^{\circ} 43' E.$, about forty-five miles east of Jodhpur city and twenty north-west of the Chandāwal and Guriya stations on the Rājputāna-Mālwa Railway. Population (1901) 8,695. It is said to take its name from a traditional founder, Rājā Bāl, and is the seat of the spiritual head (styled *Dīwān*) of the Sirvi community, a fact which adds greatly to its importance. The town is walled, and possesses a postoffice, a vernacular school, a Mārwarī *posāl*, and a hospital with beds for eight in-patients; but it is rather low-lying, and malarial fevers and diseases of the spleen are not uncommon. A religious fair, lasting for only one day, is held yearly towards the end of March on the banks of the Bānganga rivulet about three miles to the north, and is usually attended by five or six thousand persons. The story runs that Rājā Bāl was in the habit of giving great feasts at this spot, and that the deity (Gangū) once appeared to him in a dream and told him that, if an arrow were shot into the spring, she would present herself, and the water would become as sacred as that of the Ganges. The Rājā of course obeyed, and the stream—called Bānganga after *bān*, “an arrow”—has ever since been considered very holy, especially by the poorer classes.

Pipār.—A town in the Bilāra district, situated in $26^{\circ} 23' N.$ and $73^{\circ} 33' E.$, on the left bank of the Jofri river (a tributary of the Lūni), about thirty-two miles east of Jodhpur city and seven south-east of Pipār Road station on the Jodhpur-Bikaner Railway. Population (1901) 6,785. The town, which forms part of the estate of the Thākur of Nīmāj, is of some commercial importance and is noted for its dyed cloths; it is surrounded by a mud wall, and possesses a small fort, four private schools (in two of which English is taught), and a post office. The objects of antiquarian interest are three in number, namely a couple of temples inside the town, and a *kūnd* or step-well with a small broken shrine outside. Of the temples, that to Vishnu is the older, and portions appear to belong to the eighth century; the pillars and the door of the shrine have, however, been so thickly coated with plaster that the beauty of their deep artistic

carving is completely marred, and the interior is so dark that it is unsafe to walk there without a lamp. The other fane is sacred to the goddess Piplād Mātā, whose image will be found in the shrine; the whole building, with the exception of the domical roofs, is certainly old.

Tradition assigns the foundation of Pipār either to a king of the Paramāra Rājputs prior to the Christian era or to a Pāliwāl Brāhman called Pipa. Tod tells us that the latter was in the habit of carrying milk to a deity of the Serpent Race (the Takshakas or Nāgās), whose retreat was on the banks of a lake, and who deposited two pieces of gold in return for the Pāliwāl's offering. Being compelled to go to Nāgaur, the latter instructed his son to perform his charitable office, but the youth, deeming it a good opportunity of becoming master of the treasure, took a stick with him and, when the serpent issued forth for its accustomed fare, he struck it violently; the snake, however, being scotched, not killed, retired to his hole. The young Brāhman related the adventure to his mother who, dreading the vengeance of the deity, arranged to send him away the next day to his father, but was horrified, when she went to call the boy in the morning, to find, instead of him, the huge serpent coiled up in his bed! Pipa, on his return, was inconsolable, but, continuing his libations of milk, at length appeased the scaly monster who showed him where the gold was stored and commanded him to raise a monument which would transmit a knowledge of the event to future ages. Hence arose Pipār from Pipa the Pāliwāl, while the lake was named Sāmpu after the serpent. [*Progress Report of the Archaeological Survey of India, Western Circle, for the year ending 31st March 1907.*]

Desuri Hukūmat.—A district in the south-east of the Jodhpur State, having an area of 706 square miles (of which about one-fourth is *khālsa*), and consisting (in 1901) of one town (Sādri) and 160 villages. At the last census the population numbered 67,764—chiefly Hindus (more than eighty-two per cent.) and Jains (fourteen per cent.)—and the principal castes were Mahājans (10,994); Brāhmins (8,176); Rēbāris (5,383); Rājputs (5,316); Sirvis (5,086); Balais (5,039); Kumbhārs (3,573); and Mīnās (2,573). As regards physical characteristics, soils and agriculture, the district resembles Bāli which it adjoins, and it is consequently one of the best in the State; its early history is also the same as that of Bāli, the two tracts having formerly been called Godwār. The yearly receipts from the land (*khālsa* portion) average about Rs. 58,000. The Arāvalli hills form the eastern border, and the forests in this direction contain tigers, panthers, wild hogs, *sāmbār*, and occasionally black bears; marble of a rather coarse variety is quarried at Sonāna, and is found near Ghānerao and at a few other places.

Desuri became a separate *hukūmat* in 1895 with its headquarters at the village of the same name, situated 1,587 feet above the sea on the right bank of a stream called the Sukri, and about eighteen miles south-east of Jawālia station on the Rājputāna-Mālwa Railway. Population (1901) 2,099. The village is walled and

stands at the foot of a hill, the summit of which is crowned by a small fort; it possesses a post office, a private school of the indigenous type, a hospital with accommodation for four in-patients, and a shooting-box with garden attached. The sport in the neighbourhood made the place a favourite resort of the late chief, and the present Mahārājā occasionally spends a few days here.

The district is of great archæological interest. The remains at Nādol and the famous Jain temple at Rānāpur are described in separate articles below, but Nārlai (a village four miles north-west of Desuri) is also deserving of mention as possessing two Jain temples, both handsome edifices in good repair and daily use. One, dedicated to Nemināth, bears an inscription dated 1386 A.D., while the other, to Adināth, has an inscription of 1541; on the top of a hill to the north (1,804 feet above sea-level) is a colossal stone statue of an elephant.

The principal *jāgīr* estate in the district is Ghānerao, which consists of thirty-seven villages held by one of the first class nobles who is a Rāthor Rājput of the Mertia sept. The annual income is about Rs. 37,000, and the tribute payable to the Darbār Rs. 3,008. In former times, when this part of the country belonged to the Rānās of Udaipur, the estate was conferred on some ancestor of the present Thākur, and Tod tells us that it was the peculiar duty of the Ghānerao house to defend the fort of Kūmbhalgarh (in Mewār) and that several Thākurs shed their blood in maintaining it against the Mughals. "Even now," he wrote in 1819, "such is the inveteracy with which the Rājput clings to his honours that, whenever the Ghānerao chief, or any of his near kin, attends the Rānā's court, he is saluted at the *porte*, or at the *champ de Mars*, by a silver mace-bearer from the Rānā with the ancient war-cry 'Remember Kūmbhalmer'; and he still receives on all occasions of rejoicing a *khilat* from that prince." These customs are now obsolete; it would appear, however, that the place allotted to the Thākurs in the Mahārānā's court was fifth in order of precedence, and that it is still left vacant. When Godwār passed into the hands of the Jodhpur chiefs, Vīram Deo was Thākur, and Mahārājā Bijai Singh confirmed him in possession by a grant dated 1772; his successors have been Dūrjan Singh; Ajit Singh; Nābar Singh; Himmat Singh; and Jodh Singh. The principal place in the estate is the village of the same name, situated in 25° 14' N. and 73° 32' E., about four miles south by south-east of Desuri; it possesses a fairly large and strong fort, a private indigenous school (Mārwāri *posāl*), a post office, and a temple dedicated to Mahāvīra—a lofty building of considerable architectural skill. Population (1901) 2,874.

Nādol.—A village in the Desuri district, situated in 25° 22' N. and 73° 27' E., about eight miles from Jawālia station on the Rājputāna-Mālwa Railway. Population (1901) 3,050. The place is of historical interest as the former seat of a powerful branch of the Chauhān Rājputs, and as the capital of Godwār. Towards the end of the tenth century, Lākhan or Lakshman Rāj, a younger son of Wāl-

pati Rāj, the Chauhān Rao of Sāmbar, settled here, and his descendants ruled at Nādol for about two hundred years till defeated and driven out by Kutb-ud-dīn. Subsequently it was held by the Rānās of Udaipur till towards the end of the eighteenth century when, along with the district of Godwār, it passed into the possession of the chiefs of Jodhpur. The village is surrounded by a low rubble wall and has several gates, the oldest of which—the Sūraj Pol—is said to have been built by Lākhan. To the west is a dilapidated old fort with square towers of primitive design, standing on the declivity of a ridge, and inside it is an extremely handsome Jain temple of Mahāvīra, built of a light-coloured limestone (obtained from the Sonāna quarries, some eight miles off) and richly carved. This temple contains three inscriptions, each dated 1600 A.D. and recording its construction from eleemosynary funds. The other numerous and interesting remains found here include (i) the pillared temple called Khetla-kūsthān, which is the most remarkable and probably the oldest, but only eight massive columns now remain; (ii) the Someshwar Mahādeo temple with three inscriptions, dated respectively 1086, 1141 and 1143 A.D.; and (iii) the temple of Somnāth, with inscriptions of 1156 and 1162 A.D. A little to the east, on an extensive mound thickly covered with fragmentary pottery and burnt bricks, are the ruins of the ancient Nādol (Jūna Khera), among which four temples and an exquisitely carved stone *toran* or gateway may be singled out. [J. Tod, *Rājasthān*, Vol. I, pages 696—98; and A. Cunningham, *Archæological Survey of Northern India*, Vol. XXIII, pages 91—98.]

Rānāpur (or Rāmpura).—The site of a celebrated Jain temple in the Desuri district of the Jodhpur State, Rājputāna, situated in 25° 7' N. and 73° 28' E., about eighty-eight miles south-east of Jodhpur city, and about fourteen east by south-east of Fālma station on the Rājputāna-Mālwa Railway. The temple was built in the time of Rānā Kūmbha of Mewār (fifteenth century) in a lonely and deserted glen running into the western slopes of the Arāvallis and is still nearly perfect. It is most complicated and extensive in design, covering a platform measuring 200 by 225 feet exclusive of the projections on each face. In the centre stands the great shrine, not, however, occupied as usual by one cell but by four, in each of which is placed a statue of Adināth, the first of the Jain saints. On a second storey are four similar niches opening on to the terraced roofs of the building. Near the four angles of the court are four smaller shrines and around them, or on each side of them, are twenty domes supported by about 420 columns. The central dome in each group is three storeys in height and towers over the others; and that facing the principal entrance is supported by the very unusual number of sixteen columns, and is thirty-six feet in diameter, the others being only twenty-four feet. Light is admitted to the building by four uncovered courts, and the whole is surrounded by a range of cells, each of which has a pyramidal roof. Internally, the forest of columns produces endless variety of perspective with play of light and

shade. A wonderful effect also results from the number of cells which, besides being of varied form, are more or less adorned with carvings. "The immense number of parts in the building and their general smallness prevent its laying claim to anything like architectural grandeur; but their variety, their beauty of detail—no two pillars in the whole building being exactly alike—the grace with which they are arranged, the tasteful admixture of domes of different heights with flat ceilings, and the mode in which the light is introduced, combine to produce an excellent effect." Imbedded in a pillar at the entrance to the temple is a marble slab with an inscription giving the rulers of Mewār from Bāpū Rāwāl to Rānā Kūmbha. [J. Fergusson, *History of Indian and Eastern Architecture* (1899), pages 240—42.]

Sādri.—The only town in the Desuri district, situated in 25° 11' N. and 73° 27' E., close to the Arāvalli hills and the Udaipur border, and about eighty miles south-east of Jodhpur city. Population (1901) 6,621. Besides a post office, an anglo-vernacular school, and two Mārwarī *posāls*, Sādri possesses a step-well (constructed, according to the inscription it bears, in 1598 in the time of Rānā Amar Singh I of Mewār) and several handsome temples. Of the latter, the oldest appears to be that of Mahādeo which has two inscriptions dated respectively 1086 and 1167 A.D.—the first mentioning Jōjjalla and the second Kelhann, both of whom were Chauhān rulers of Nādol; the temple of Jogeshwar, with two well-preserved inscriptions of 1173 and 1193, shows much fine carving, and a Jain shrine built in 1440 (in Rānā Kūmbha's time) by one Dhāna Sāh, is also deserving of notice.

Didwāna Hukūmat.—A district situated in the north-east of the Jodhpur State, with an area of 1,136 square miles, of which barely 200 square miles are *khālśa* or under the direct management of the Darbār. In 1901 it consisted of one town (Didwāna) and 113 villages, containing 44,642 inhabitants, of whom more than eighty-three per cent. were Hindus and fifteen per cent. Musalmāns; the principal castes were Brāhmans (4,723); Rājputs (4,573); Jāts (4,223); Balais (3,329); and Mahājans (2,700). The soil is sandy and the water of the wells mostly brackish; consequently, the district is not very fertile. Agricultural statistics are forthcoming only for the *khālśa* villages, in which about 184 square miles are available for cultivation, and of the latter, some three-sevenths are usually cultivated. Of the cropped area, *bājra* generally occupies about fifty-six, *jowār* five, and the minor millets and pulses nearly thirty-four per cent., while barley and wheat are ordinarily grown in 270 and 64 acres respectively. The land revenue realised by the Darbār averages Rs. 30,300 yearly.

The principal *jāgīr* estate in the district is Lādnum which, in 1901, formed part of the Nāgaur *hukūmat*; it consists of the town of the same name and six villages, held by one of the second class nobles who belongs to the Jodha sept of the Rāthoras. The annual income is about Rs. 20,000, and the tribute payable to the Darbār

Rs. 1,600. The estate was originally granted by Mahārājā Bijai Singh in 1782 to Sheodān Singh, and is now held by Thākār Anand Singh. The town of Lādunn is situated in $27^{\circ} 39'$ N. and $74^{\circ} 24'$ E., about 130 miles north-east of Jodhpur city and within four miles of the Bikaner border. Population (1901) 8,061. The place is the home of some of the wealthy Mārwārī merchants of Calcutta and other cities, and is locally famous for the manufacture of gold ornaments; it has a post office and about half a dozen private schools, in one of which English is taught.

Didwāna Town.—The headquarters of the district of the same name, situated in $27^{\circ} 24'$ N. and $74^{\circ} 35'$ E., about 130 miles north-east of Jodhpur city and thirty north by north-west of, Makrāna station on the Jodhpur-Bikaner Railway. Population (1901) 9,410. The place appears to be of considerable antiquity and is said to have been in existence for about two thousand years; it is related that on one occasion, when an excavation was being made, a stone idol was found bearing the date of *Samvat* 252 (or 195 A.D.), and in digging wells or the foundations of new houses, articles of pottery have been discovered twenty feet from the surface. The town was formerly called Drūdwanak, and was held, first by the Chauhān kings of Sām-bhar, next by the Mughal emperors, next by the Jodhpur and Jaipur States jointly, and then (for a short time) by the Nawāb of Jhūnjhunu (in the Shekhāwati district of Jaipur) till it was acquired by Mahārājā Bakht Singh of Jodhpur in the middle of the eighteenth century. It is surrounded by a substantial stone wall, and contains many fine houses, a post office, an anglo-vernacular primary and a vernacular school, four private schools, and a couple of hospitals—one maintained by the Darbār, and the other by the Government of India for the benefit of those employed on the salt-lake—which together have accommodation for twelve in-patients. Among buildings of archaeological interest may be mentioned a mosque said to have been built by Akbar and possessing a well-preserved Arabic inscription, several old temples, and some humble looking cenotaphs bearing inscriptions dating from the ninth century. About a mile off is a place called Gūda, where there are some fine old temples and buildings belonging to the Sādhus of the Niranjani sect, and where a small fair is held yearly. Lastly, at Daulatpurā, a village about four miles to the south-east, a copper-plate, inscribed with an important historical record, was found a few years ago; it is dated *Vikramā Samvat* 953 or A. D. 896 (in the reign of Bhojadeva, king of Mahodaya or Kanauj), and has been published in the *Epigraphica Indica*, Vol. V.

Immediately to the south and south-west of the town of Didwāna is a salt-lake, leased to the Government of India in 1878 for an annual sum of two lakhs. The valley in which the source lies is about $3\frac{1}{2}$ miles in length by $1\frac{1}{2}$ in breadth, running south-west and north-east, and, according to tradition, was once a river which flowed from the north-west and became choked with sand higher up in its course; about half a mile at each end of this valley is separated from

the central portion by earthen embankments thrown across, and the central section, which forms the source now worked, is thus about $2\frac{1}{2}$ miles in length. The bed is composed of black tenacious mud, very similar in appearance to that of the lake at Sambhar, and beneath it is a stratum of strong brine, varying in density from about 20° Beaumé to very nearly the saturation point. Some water collects annually during the rainy months, but it evaporates rapidly, leaving a thin crust of salt over a small area in the centre.

The methods of manufacture are exceedingly simple, and are identical with those followed in olden days. Wells are dug in the bed until the brine springs are reached at a depth of about twelve feet from the surface, and the brine is then lifted by a weighted pole and bucket into evaporation pans of rectangular shape, which are prepared by removing the mud of the surface to a depth of from six to twelve inches and roughly levelling the exposed area. At first, the bed of the pan absorbs nearly the whole of the brine, and for a few years the out-turn is small in quantity and discoloured by the black mud, but gradually large crystals of a species of sulphate of soda form and increase in number yearly until their accretions constitute a solid and hard bed—so hard that a pickaxe would be needed to break through it. When the bed has consolidated in this manner, a pan is capable of producing clean white salt in large quantities; brine is run into it from the well to a depth of two or three inches, and as salt forms, it is scraped up into low ridges with a wooden instrument. The collection of the salt into ridges is steadily carried on from the time precipitation first commences until the crop is ready, the position of the ridges being changed daily, so that all the crystals may be immersed in the brine; in this way the crystals increase in size, and many of them adhere together in lumps about as large as small marbles. When it is found that the salt in a pan has sufficiently developed as regards the size of its crystals, and such a quantity has formed as to render the daily moving of the ridges laborious, it is collected in heaps in the pan and then removed to a place of storage on the edge of the source.

Didwāna salt contains from 95 to 98 per cent. of chloride of sodium, and is white and clean, but, owing to the high specific gravity of the brine and rapid precipitation, its crystals are always small. Since the Government of India assumed management in 1878, about 365,000 tons of salt have been produced here, and the average annual out-turn for the last ten years has been nearly 9,600 tons, of which about four-fifths are exported to the Punjab and the rest is consumed in Rājputāna. The number of pans varies from time to time, but they may be divided into two groups—the one (and the larger) being at the southern, and the other at the western edge of the depression; each pan is usually about eighty feet square, and should produce from ten to twelve tons of salt every fortnight or so. Most of the wells and pans now in use have been in existence for very many years, and it has hardly been found necessary to construct new ones; the supply of brine is abundant and inexhaustible, and in the dry

climate of the desert manufacture can be carried on continuously for nine months in the year, but, as a rule, work is confined to about two or three months. [F. Ashton, *The Salt Industry of Rājputāna in The Journal of Indian Art and Industry*, Vol. IX, January 1901.]

Jaitāran Hukūmat.—One of the eastern or submontane districts of the Jodhpur State, having an area of 959 square miles (of which only about one-twentieth is *khālsā*) and containing two towns (Jaitāran and Nimāj) and 116 villages. In 1901 the population numbered 67,733, and the principal castes were Mahājans (6,066); Balais (5,800); Sirvis (5,271); Brāhmans (4,407); Rebāris (3,637); Rājputs (3,432); Gūjars (3,014); and Mālis (3,010). The river Lūni flows through the northern portion of the district, and there are several other streams, such as the Līlri and the Raipur Lūni, all having their source in the Arāvalli hills which form the eastern border; the soil is fertile, wells containing good water are numerous, and both spring and autumn crops are grown. Agricultural statistics are available only for an area of about thirty-six square miles, of which nearly one-third is usually cultivated yearly; the land revenue realised by the Darbār averages Rs. 15,000. Of the numerous *jāgīr* estates, the four most important (Agewa, Nimāj, Raipur and Rās) are all held by senior nobles of the first class and are noticed separately below.

Agewa.—A *jāgīr* estate in the Jaitāran district, consisting of three villages held by one of the first class nobles who is a Rāthor Rājput of the Udāwat sept, i.e. the branch of the Rāthors claiming descent from Udai Singh, the son of Rao Sūja. The annual revenue is about Rs. 12,000, and a tribute of Rs. 880 is paid yearly to the Darbār. The estate is said to date from 1839, when Mahārājā Mān Singh granted it to Sheonāth Singh; the subsequent Thākurs have been Bakhtāwar Singh; and Bhopāl Singh. The last is the present holder; he was born in 1874 and succeeded by adoption in 1897. The estate takes its name from its chief village, which is situated in 26° 9' N. and 73° 56' E., about fifty-five miles east by south-east of Jodhpur city and eleven miles almost due north of Guriya station on the Rājputāna-Mālwa Railway. Population (1901) 1,351.

Jaitāran Town.—The headquarters of the district of the same name, situated in 26° 13' N. and 73° 57' E., about fifty-six miles east of Jodhpur city and fourteen north-west of Barr station on the Rājputāna-Mālwa Railway. Population (1901) 4,033. It possesses a post office, a vernacular school, three Mārwarī *posāls*, and a strong fort with massive walls and four large towers. The town is said to have been founded by the Sindhal Rāthors in 1302 and to have been wrested from them by Rao Sūja. According to the *Ain-i-Akbarī*, the place was taken by Saiyid Mahmūd of Bārha and Shāh Kulī Khān Mahram in the third year of Akbar's reign (1558), while the *Akbar-nāmah* says that this happened in 1556, but the emperor soon restored it to the Jodhpur chief—probably to Rājā Udai Singh about twenty-five years later.

Nimāj.—A *jāgīr* estate in the Jaitāran district, consisting of eleven villages yielding about Rs. 70,000 a year and held by one of the first class nobles of Mārwar who belongs to the Udāwat sept of the Rāthor Rājputs and pays an annual tribute of Rs. 2,808 to the Darbār. The estate is said to have been originally granted by Mahārājā Ajit Singh in 1708 to Jagrām, and the following is a list of his successors to date:—Kushāl Singh; Amar Singh, who took part in the siege of Ahmadābād in 1731; Kalyān Singh; Daulat Singh; Shambhu Singh; Sūrthān Singh; Sāmānt Singh; Sawai Singh; Gulāb Singh; Chhatar Singh; and Prithwī Singh. The last named is the present Thākur, was born in 1888, and succeeded his father in January 1901.

The town of Nimāj is situated in 26° 9' N. and 74° 1' E., nearly sixty miles east by south-east of Jodhpur city and ten north of Haripur station on the Rājputāna-Mālwa Railway. Population (1901) 4,104. It possesses a private school of the indigenous type.

Raipur.—A *jāgīr* estate in the Jaitāran district, consisting of 37½ villages held by one of the first class nobles who, like Agawa and Nimāj (just mentioned), is a Rāthor Rājput of the Udāwat sept. The annual revenue is about Rs. 66,000, and a tribute of Rs. 3,364 is paid yearly to the Darbār. The estate dates from 1606, when it was granted by Sawai Rājā Sūr Singh to Kalyān Singh, and it has since been held by the following:—Dāyāl Dās; Bāl Rām, who fought at the battle of Fatehābād near Ujjain in 1658; Hardeo Rām, who assisted in defeating the imperial troops at Sāmbar in 1709; Bhūkar Singh, who joined the army that invaded Bikaner about 1740; Kesri Singh, wounded in the desperate engagement with the Marāthās at Merta in 1790; Fateh Singh; Arjun Singh; Rūp Singh; Mādho Singh; Lachhman Singh; and Hari Singh.

The last named is the present Thākur, was born in 1863, and succeeded in 1879. He resides at the village which gives its name to the estate and is situated on the left bank of the Raipur Lūni river, in 26° 3' N. and 74° 2' E., close to the old Agra-Ahmadābād road and only two miles north of Haripur station on the Rājputāna-Mālwa Railway. Population (1901) 3,566. The Thākur maintains a vernacular school, and outside the village is a fine tank from which the people obtain their water-supply.

Rās.—A *jāgīr* estate of seventeen villages in the Jaitāran district, yielding about Rs. 60,000 annually; it is held by one of the first class nobles of the Jodhpur State who belongs to the Udāwat branch of Rāthor Rājputs and pays a tribute of Rs. 3,180 a year to the Darbār. The estate was first granted by Mahārājā Ajit Singh in 1712 to Subh Rām, and his successors have been:—Bakht Singh; Kesri Singh; Bhao Singh; Jawān Singh, who was wounded at the battle of Tonga in 1787; Bhūm Singh; Bhīm Singh; Pratāp Singh; and Fateh Singh. The last named (the present Thākur) was born in 1874, was educated at the Mayo College at Ajmer, and succeeded his father in 1893.

The estate takes its name from the village of Rās, which is situated in 26° 18' N. and 74° 12' E., close to the Ajmer border and about sixteen miles from the stations of Kharwā and Beāwar on the Rājputāna-Mālwa Railway; the river Līlri flows within half a mile of the place to the south, and on the west is a ridge of hills attaining an altitude of 1,500 feet above the sea. Population (1901) 3,324.

Jālor Hukūmat.—A district in the south and, to some extent, the south-east of the Jodhpur State, having an area of 1,552 square miles, of which less than one-ninth is *khālsa*. In 1901 it consisted of one town (Jālor) and 252 villages, containing 140,880 inhabitants, of whom eighty per cent. were Hindus; the principal castes were Brāhmans (16,209); Mahājans (15,157); Rājputs (11,986); Balais (8,518); Minās (7,406); Pātels (7,273); and Rebāris (5,071). The country is for the most part flat and sandy, but two notable ranges of hills exist, one west of the town of Jālor where a height of 2,408 feet is attained, and the other about eight miles to the south-east, the highest peak of which is 2,757 feet above sea-level. The river Jawai flows through the centre of the district on its way to join the Lūni, and it has one or two small tributaries such as the Khāri. On the whole, the tract may be described as fairly fertile, the soil being good and wells plentiful in about half of it. The *khālsa* lands are nearly 165 square miles in extent, and the portion thereof available for cultivation is about 146 square miles; during recent years the average annual area cropped has been 48 square miles, of which *bājra* occupied fifty-eight per cent., the minor millets and pulses twenty-three per cent., and wheat and *til* each between four and five per cent., while *jowār*, barley, cotton, maize and tobacco have all been grown to a small extent. The land revenue realised by the Dārbar amounts to Rs. 25,100 a year. The principal *jāgīr* estate, Bhadrājan, is described below.

Bhadrājan.—An estate in the Jālor district, held on the *jāgīr* tenure by one of the first class nobles of Mārwar who is a Rāthor Rājput of the Jodha sept, and consisting of twenty-seven villages worth about Rs. 45,000 a year. An annual tribute of Rs. 2,556 is paid to the Darbar. The estate is said to have been granted by Sawai Rājā Sūr Singh in 1596 to Mukand Dās, and has since been enjoyed by Udai Bhān, who took part in the battle of Fatehābād near Ujjain in 1658 and subsequently served under Mahārājā Jaswant Singh on the north-west frontier, where he was wounded; Bibāri Dās; Bāgh Singh; Udai Rāj; Umed Singh; Zālim Singh; Bakhtāwar Singh; Indra Bhān; Sangrām Singh; Pratāp Singh; Sheodān Singh; and Devī Singh. The present Thākur (Devī Singh) was born in 1902 and succeeded his father in 1906.

The principal place in the estate is the village of the same name, situated in 25° 36' N. and 72° 53' E., about fifty miles almost due south of Jodhpur city and twenty-two in the same direction from Dūnāra station on the Jodhpur-Bikaner Railway. Population (1901) 1,644. The old name of the village is said to have been Subhadra-Arjuna-Nagara, and tradition ascribes the con-

struction of one of its temples—that to Subhadra Mātā—to the time of the Pāṇdavas; there is another handsome temple here, as well as a small fort and a *kūṇḍ* or reservoir in good repair.

Jālor Tōwn.—The headquarters of the district of the same name, situated close to the left bank of a river, which is here called the Sukri but is higher up known as the Jawai, in $25^{\circ} 21' N.$ and 72°

About a hundred years after this event, Alā-ud-dīn, after a lengthy siege, captured the place from Kānar Deo Chauhān (third in descent from Udaī Singh), and a three-domed mosque, said to have been built by him, is still in good repair and daily use. The Muhāminādans appear to have remained in possession till about 1540, when both the fort and district were acquired by Rao Māldeo, but only for a time; the emperor Akbar and his immediate successors undoubtedly held sway here, though not uninterruptedly, and it is interesting to read that an ancestor of the ruler of Pālanpur held the district, as a grant from Aurangzeb, from 1682 till 1689 when, "being unable to withstand the increasing power of the Rāthors of Mārwar," he was "compelled to quit the country and retire to Pālanpur." It is probable that the town and district of Jālor became permanently a part of the Jodhpur State soon after Aurangzeb's death in 1707.

Jaswantpura Hukūmat.—A district in the south of the Jodhpur State, with an area of 1,360 square miles, of which rather less than one-seventh is *khālsa*; in 1901 it consisted of one town (Bhīnmāl) and 198 villages, containing 83,370 inhabitants of whom nearly seventy-seven per cent. were Hindus, ten per cent. Jains and almost ten per cent. Animists (Bhils and Girāsins). The most numerous castes were Balaīs (9,682); Mahājans (9,382); Brāhmans (8,927); Rājputs (6,539); Pātels (6,190); Rebāris (5,609); and Bhils (5,339). The northern portion is flat and sandy, while the southern is much broken up by hills and ravines, and is fairly well wooded, particularly in the south-east, near the village of Jaswantpura. Tigers and black bears are occasionally found in the hills in this direction, and four lions were shot in the vicinity in 1872. Agricultural statistics are available for the *khālsa* villages, having an area of 187 square miles of which about 157 square miles are culturable; the average annual area cropped during recent years has been 34 square miles, only two of which were irrigated, and the principal crops are *bājra*, the smaller millets and pulses, *til* and wheat, occupying respectively about sixty, twenty-six, seven, and five per cent. of the cultivated area. The land revenue realised by the Darbār averages Rs. 27,000 yearly.

The headquarters of the district are at the village of the same name, which is situated in 24° 47' N. and 72° 28' E. at the foot of a hill, about thirty miles north-west of Abu Road station on the Rājputāna-Mālwa Railway. It was built in 1883-84, when it took the place of a village called Lohiāna which had to be levelled to the ground on account of the predatory habits of the Thākūr (or Rānā, as he was styled) and his Bhil following; the site is rocky and fairly drained, and it is well laid out with broad streets and substantial houses. Population (1901) 1,297. The place possesses a post office and a vernacular school, but its hospital (established in 1891) has been recently transferred to Bhīnmāl. Immediately to the west is the Sūnda hill, presided over by the goddess Chāmūnda in a rock-cut cave-like temple having a large domed and marble-paved hall, built in 1262 A.D. and containing several inscriptions, the oldest of which

(of the same date as the temple) is important as enumerating nineteen generations and the principal events of the Sonigara (Chauhān) rule. The Sūnda hill attains an altitude of 3,252 feet, but the spot on which the temple stands is on the northern face and is barely 1,400 feet above the sea.

The district of Jaswantpura contains no *jāgīr* estates of importance, and the only other place of interest (besides Bhīmāl, which is noticed below) is the village of Ratanpur in the south, where there are said to be a couple of old temples, namely one to Siva built, according to the inscription it bears, by Pannapākshadeva, a feudatory of Kumārāpāla of Gujrat, in the middle of the twelfth century, and the other to Pārasuāth, said to have been erected in 1171 A.D., and having two other inscriptions dated respectively 1191 and 1291 of the same era.

Bhīmāl.—The only town in the Jaswantpura district, situated in 25° N. and 72° 16' E., about 105 miles south-west of Jodhpur city and fifty north-west of Alm Road station on the Rājputām-Mālwā Railway. Population (1901) 4,515. It contains a post office, a vernacular school, a Mārwarī *posāl*, and a hospital with accommodation for six in-patients. The principal manufactures are utensils of bell-metal. The old name of the place was Sīmāl or Bhīlāmāl (the *Pi-lo-mi-lo* of the Chinese pilgrim, Hiuen Tsiang). It was the ancient capital of the Gūjars between the sixth and ninth centuries, but very few traces now remain; it is said to have had several gates, of which the one to the south of the present town—the Gujarātī *durwāza*—is still distinguishable, though in ruins, and from this may be traced, first to the south and then to the western or Pīpaldwār gate, a long line of mounds which probably covers the ancient site. A dozen old tanks and wells, the stone image of a king seated on a *sinhāsan* (lion-supported throne), and a number of temples are of antiquarian interest; and several Sanskrit inscriptions, referring mostly to the time of the Paramāra and Chauhān rulers, have been found.

Jodhpur Hukūmat.—A district situated almost in the centre of the State of the same name, with an area of 2,896 square miles, of which rather more than one-fifth is *khālsa*; in 1901 it consisted of two towns (Jodhpur city and the suburbs) and 370 villages, containing altogether 235,461 inhabitants. The most numerous castes were Brāhmins (24,907); Jāts (24,732); Rājputs (17,708); Mahājans (14,843); Banijs (12,213); Mālis (9,667); Chākars (8,672); and Kumbhars (7,720). In about half of the district wells are plentiful, and both spring and autumn crops are raised; the prevailing soil is *bhūri*, a sandy loam and fairly rich. Of the area available for cultivation in the *khālsa* villages for which returns exist (namely 535 square miles), about one-fourth is usually cultivated every year, the irrigated area averaging but five square miles; and of the land under crop, *bājra* occupies nearly fifty-four, the inferior millets and pulses twenty, *jowār* seventeen, wheat about three, and oil-seeds between one and two per cent., while there are generally a few acres under barley, cotton, gram and tobacco. The land revenue realised by the

Darbār averages Rs. 1,02,000 a year. Sandstone is found in abundance in the vicinity of the capital and at Tivri and other places, while some of the villages are famous for their dyed and printed cloths.

The principal *jāgīr* estates are Arap (which, being of the first class, is dealt with in a separate article) and Jhālāmand. The latter consists of nine villages worth about Rs. 14,000 a year and is held by a Thākur of the second class, who is a Sesodia Rājput of the Rānawat sept and pays an annual tribute of Rs. 1,128 to the Darbār; the estate dates only from 1845, when it was granted by Mahārājā Takht Singh to Gambhīr Singh, and the name of the present holder is Zorāwar Singh. Among places of historical or archæological interest (besides Jodhpur city and Mandor, described below), the following are worthy of mention:—(i) Arnā; (ii) Ghatiāla; (iii) Osiān; and (iv) Tivri. Arnā is an ancient place about ten miles south-west of Jodhpur city. On either side of the hills bordering on a valley is a group of old temples which are not later than the eleventh century and are said to have been built by a Paramāra Rājā called Gandharv Sen. Ascending the hill, one finds on the right a small but beautiful temple, with a porch in front of it; inside the shrine is a *lingam* which is still worshipped. Immediately to the north is a series of plain cells, cut in the rock, and beyond it another ancient temple, separated from the cells by a masonry wall. Higher up the hill will be seen a *kūnd* or reservoir, and close by a hall (*sabhāmandap*) without any shrine attached to it; on one of the pillars is an inscription of the eleventh century which tells us that a temple of Namdā Devī was erected on the top of a mountain Hemavanta by a Brāhman whose name is not given. This temple has now disappeared, but the goddess is enshrined in a small modern building on the opposite side of the valley, and a fair is annually held there in her honour. Scattered about in the vicinity are old figures of Brahmā and Siva. Ghatiāla is an old village held jointly by no less than twenty Purohit Brāhmins, and is situated some eighteen miles north-west of Jodhpur city. It possesses two objects of antiquarian interest, both of which lie a short distance to the east. The first is a ruined Jain temple (now known as Mātājī-kī-sāl) which, according to the Prākṛit inscription found on one of the slabs, was erected in 861 A.D. by the Parihār king Kakkuka of Maddodara (Mandor); the other is popularly called Khākhū-devlām, and consists of a number of memorial stones (*devlām*), surrounding a prominent red sandstone *lāt* or column, the capital of which is decorated with a quadruple image of Ganapatī, while the lower part of the shaft bears three inscriptions, all of which are dated 861 A.D. One of these inscriptions—the longer of the three—sets forth in Sanskrit prose the genealogy and exploits of the Parihār chief already mentioned, and informs us that he erected two pillars, one at Mandor (of which no trace remains) and the other at Rohimsaka (which was doubtless the old city that once stood here). Another inscription tells us that Rohimsaka was formerly invested by the Abhīras (the Abīrs of the present day) and was consequently deserted by good people, but Kakkuka inflicted a crushing defeat on them and, by establishing a

market and building many houses, induced the Brāhmins, warriors and merchants to live and settle there. There seems little doubt that the Parihār chief raised this column of fame (*kīrtti-stambh*) in order to commemorate his victory over the Abbīras. The village of Osiān is situated about thirty miles almost due north of Jodhpur, and is said to have been the original home of the Oswāl Mahājans. It literally abounds with ancient fanes, but the most noteworthy are (i) the temple of Sachiyā Mātā, which is perched on an eminence and was built by Uppal Deo Paramāra in probably the eighth century, but it has subsequently undergone such extensive repairs and restorations that it cannot, as it stands, be earlier than the thirteenth century; (ii) a Jain temple with a huge image of Mahāvira, which was originally constructed in the time of the Parihār king, Vatsarāja, *i.e.* about 783 A.D. To the north-east of the village stands a memorial stone bearing the date 895 A.D., and the tops of many others are visible above the sand in the vicinity. Tivri is remarkable only for an old temple known as that of Khokri Mātā, which is believed to belong to the ninth century; the walls are plain, but the spire shows fine carving. [A fuller account of Arnā, Ghatiāla, Osiān and Tivri will be found in the *Progress Report of the Archaeological Survey of India, Western Circle*, for the year ending 31st March 1907.]

Asop.—An estate of seven villages in the Jodhpur district, held on the *jāgīr* tenure by one of the first class nobles of Mārwar who is a Rāthor Rājput of the Kūmpāwat sept, or the branch of the family claiming descent from Kūmpa, a brother of Rao Jodha. The yearly revenue is about Rs. 30,000, and an annual tribute of Rs. 3,120 is paid to the Darbār. The estate was first granted in 1725 by Mahārājā Abhai Singh to Kani Rām, who was wounded six years later at the siege of Ahmadābād; his successors have been Dalpat Singh; Mahesh Dās, wounded at the battle of Merta in 1790; Ratan Singh; Kesri Singh; Bakhtāwar Singh; Sheonāth Singh; and Chain Singh. The last is the present Thākūr; he was born in 1861, succeeded by adoption in 1873, and is a member of the State Council.

The principal place in the estate is the village of the same name, situated in 26° 48' N. and 73° 35' E., about fifty miles north-east of Jodhpur city and fourteen north-west of Gothan station on the Rājputāna-Mālwa Railway. Population (1901) 2,938. There are two schools of the indigenous type, and a post office here.

Jodhpur City.—The capital of the State and the headquarters of the district of the same name, situated in 26° 18' N. and 73° 1' E., and distant by rail about 380 miles from Delhi, 590 from Bombay and 1,330 from Calcutta. The population of the place (including the suburbs) was 63,329 in 1881; 80,405 in 1891; and 79,109 in 1901; and in the two years last mentioned between seventy-six and seventy-seven per cent. of the people lived within the city walls. In 1901 Hindus formed more than seventy-three, Musalmāns about twenty, and Jains five per cent. of the total population. Of the inhabitants of the city, 8,438 were Brāhmins, 5,827 Mahājans; 3,337 Rājputs (including 230 Musalmāns); 2,846 Jāts; 2,696 Chākars (of

whom twenty-seven were Musalmānis); 2,157 Kāyasths; and 2,032 Mālis; similar figures are not available for the suburbs.

Jodhpur takes its name from Rao Jodha who founded it in 1459; the old wall with four gates built by him is now included within the limits, and is situated in the south-west of the modern city which lies on sloping ground in the form of a horseshoe around the base of the rock on which stands the fort. It has an area of about two square miles, and is encircled by a strong massive wall, built in the first half of the eighteenth century, which is 24,600 feet long, three to nine feet thick, and fifteen to thirty feet high, and is strengthened in many places by towers, buttresses and ramparts for artillery, supporting a complete line of battlements and having loopholes and barbicans for defensive operations. Access is obtained by means of six gates, studded with sharp iron spikes to protect them against elephant ramming; five of the gates are called after the towns they face, namely Jālor, Merta, Nāgaūr, Siwāna and Sojat, while the sixth is named Chānd Pol because it confronts the direction in which the new moon (*chānd*) is visible; a seventh gate once existed on the north side, but was blocked up many years ago, having always been considered a weakness in the defence of the place. The walls and towers near the Nāgaūri gate show marks of cannon-balls left by the armies of Jaipur and Bikaner which, with the aid of the great freebooter, Amīr Khān, marched on Jodhpur about 1806 to support the pretender Dhonkal Singh against Mahārājā Mān Singh; eventually Amīr Khān changed over to the side of the latter, and the insurgents were forced to retire with considerable loss and ignominy.

The fort, which is in its way the finest in Rājputāna, commands the city and, standing in great magnificence on an isolated rock about four hundred feet above the surrounding plain, attracts the eye from afar; its wall, varying from twenty to one hundred and twenty feet in height and from twelve to seventy feet in thickness, encloses an oblong space about five hundred yards in length by two hundred and fifty in breadth at the widest part. There are two main entrances, the Jai Pol at the north-eastern corner and the Fateh Pol in the south-west leading up from the city, and between them are several other gates and inner walls erected for purposes of defence. The Fateh Pol was built by Mahārājā Ajit Singh shortly after Aurangzeb's death in 1707 and the Jai Pol by Mahārājā Mān Singh about a hundred years later; the door of the latter gate is said to have been brought from Ahmadābād by the Thākur of Nīmāj in or about 1731. The principal buildings in the fort are a series of apartments forming the palace, the most noteworthy being (i) the Motī mahal, built by Sawai Rājā Sūr Singh and added to by Mahārājā Takht Singh; (ii) the Fateh mahal built by Mahārājā Ajit Singh to commemorate the expulsion of the Mughal garrison in 1708; and (iii) the room now used as an armoury. The buildings generally are decorated with beautifully carved panels and pierced screens of red sandstone, and some of the ceilings and walls possess fresco paintings of considerable artistic merit. The fort is supplied with water from the Rānī Sāgar,

a tank constructed by one of the wives of Rao Jodha; the water is lifted about four hundred feet by means of a steam force-pump (erected some fifteen years ago at a cost of nearly Rs. 16,000) and is delivered by pipes. Two wells also exist within the citadel; one, called Pātalin, is said to be 450 feet in depth, and the other (in the Chaunkilao mahal) is believed to be even deeper. The largest and most powerful guns are styled Kilkila and Shambhubhān, and were both brought from Ahmadābād in 1731 by Mahārājā Abhai Singh.

The city contains many handsome buildings, including ten old palaces, some town-residences of the Thākurs, and eleven fine temples, the most beautiful, architecturally, being the Kūnj Bibāri-kā-mandir, built by Gulāb Raijī, a concubine of Mahārājā Bijai Singh. The water-supply is stored in seven tanks, some of which can, when necessary, be fed by canals from the Knilāna reservoir on the west or from Bālsamand on the north; many of the streets are narrow and irregular, some being blind alleys, but the main thoroughfares have been much improved during recent years by being paved with stone and provided with side drains. The local industries are unimportant, consisting chiefly of lacquer work, dyeing of cotton cloths and the manufacture of brass and iron utensils; the *phūlmālas* or embroidered silk knotted threads, made by Oswāl Mahājans and worn round the turban, and the quilted dressing-gowns are, however, more or less peculiar to the place. The bullock tramway, which connects the city with the railway station, has already been noticed at page 122 *supra*, as have the municipal committee and the steam conservancy tramway—the latter the first of its kind in Rājputāna—in Chapter XV, and the Central jail and subsidiary prison, both of which are outside the city walls, in Chapter XVIII; while a list of educational and medical institutions will be found in Tables Nos. XXXI and XXXIII in Vol. III-B respectively.

It may here be noted that Jodhpur was the most literate city in Rājputāna at the last census, 223 persons in every thousand having been returned as able to read and write; it also held the premier position for the sexes separately, namely 421 per mille of the males and 27 per mille of the females. The institutions maintained by the Darbār consist of a first grade College; a high school with lower secondary and primary sections, a boarding-house for Rājput boys, and a special class in which telegraphy is taught; two primary schools (one anglo-vernacular); a Sanskrit school; and a girls' school. The above are located mostly in the suburbs, while the city proper possesses numerous schools, some of which receive grants-in-aid from the State and others are of the indigenous variety. Jodhpur is also well supplied with medical institutions, there being three large hospitals in the city (described at page 173 *supra*) as well as a smaller one and a dispensary, while in the suburbs are to be found the Imperial Service cavalry and jail hospitals and a couple of dispensaries, one of which is close to the Residency and is maintained by Government, and the other is for railway employes.

Half a mile to the north-east of the city is the village of Mahā-mandir, surrounded by a fortified stone wall about a mile and a quarter in circumference and having four gates. Population (1901) 2,266. It possesses a magnificent temple (whence the village is called Mahā-mandir or "the great temple") and two fine old palaces, one of which is consecrated as the supposed abode of Mahārājā Mān Singh's spirit, while the other is occupied by a Nāth who is a descendant of the same chief's spiritual guide. To the south of the city the principal buildings are the Jaswant Sarāi, the dāk-hungalow, the post office, the railway station and workshops, the Central jail, the flour-mill, the ice factory, the Residency and other houses occupied by officials; and to the east and north-east are the handsome public offices, the late Mahārājā's palace at Rai-kā-bāgh, the Imperial Service cavalry lines, and the fine new palace at Rātanāda.

Mandor.—A ruined town in the Jodhpur district, the Maddodara of inscriptions, situated in 26° 21' N. and 73° 2' E., about five miles north of Jodhpur city. The population in 1901 numbered 1,450, and consisted largely of Mālīs or gardeners. The place, which is said to be named after Mandu Rishī, is of great historical interest from having been the capital of the Parihār Rājputs till 1381 (when it was wrested from them by Rao Chonda), and subsequently the seat of government of the Rāthors till 1459, when Jodhpur city was founded. The old fort (Jūnāgarh), built originally by a Buddhist architect, overlooks the Nāgādārī stream and is now in ruins; it contains a low and dark pillared chamber or cave, in which is found the sculptured effigy of Nāhar Rao, a famous (and, according to some, the last) Parihār chief of Mandor. On the top of the cave may be seen some individual's name engraved in two or three places in characters of the early Gupta period, while just outside on a raised platform a fragment of an inscription (of probably the tenth century), mentioning a son of Kakka of the Parihār dynasty, was recently discovered, but the stone has since been removed to the historic office at Jodhpur. The whole ground in the vicinity is covered with the remains of many ancient temples, the most noteworthy of which is a two-storeyed Jain structure, lying to the north and consisting of small cells running on the three sides of an oblong both above and below; the pillars of the porch in front of the shrine are perhaps as old as the tenth century. About half a mile to the south-east are two pillars, which are the only parts now surviving of what Tod calls "a gateway and magnificent *Torun* or triumphal arch"; they are the oldest objects of antiquarian interest now obtaining in Mandor and, according to Mr. Bhandarkar, * "cannot be posterior to Christ."

On an elevated plateau not far from the fort are the *pānch kūnda* or five sacred reservoirs—a place of pilgrimage for Hindus—and close by are the cenotaphs of four of the earlier Rāthor rulers; the carving on that of Rao Ganga, who died about 1532, is very fine, but unfortunately the spire of the building has long disappeared.

* *Progress Report of the Archaeological Survey of India, Western Circle, for the year ending 31st March 1907, page 33.*

A little to the east is the *dargāh* of Tanna Pīr, built in the time of Mahārājā Mān Singh and held in high veneration; it is decorated with some handsome sandalwood carvings, and its courtyard contains several older tombstones bearing Arabic inscriptions and a *satī* tablet dated 1169 A. D. To the south of the reservoirs will be seen a large number of *chhatris* or monuments of the canopy type, which pertain to the Rānis of Mārwar; the most prominent is that of the consort of Mahārājā Mān Singh—a lady of the Kachwāha clan of Rājputs—and it is handsomely carved, possesses thirty-two pillars, and bears an inscription giving 1826 A. D. as the year of her death.

At Mandor itself, near Moti Singh's garden, are the cenotaphs "attesting the epoch of Mārwar's glory, which commenced with Māldeo and ended with the sons of Ajit," and the humbler monuments erected over the ashes of the later chiefs. Of these buildings, that raised in memory of Ajit Singh (who was murdered by his son in 1724) is larger and grander than anything in the neighbourhood; it is profusely inscribed, and marks the spot where his sixty-four wives and concubines immolated themselves on his funeral pyre. Another object of interest close by is the hall of heroes, known as the *Tetīs karor devatān-kā-sthān* or the abode of the 330 million gods of Hindu mythology; it is a gallery containing sixteen colossal figures hewn out of a single natural rock, and of these figures, seven are images of gods and nine of heroes. The latter are as follow:—(i) a Gosainjī or high priest; (ii) Mallināthjī, the eldest son of Rao Salkha, after whom the district of Mallāni is named—see page 199 *infra*; (iii) Pābujī, a Rāthor Rājput, who is said to have first brought the camel into general use and to have been a great protector of cows; (iv) Rāmdeoji, a Tonwar Rājput of the family of Anang Pāl of Delhi, who founded the village of Rāmdeora (about ten miles north of the town of Pokaran), where a fair is held yearly in his honour in August or September, and is sometimes called Rāmsāh Pīr and is worshipped by the lower classes; he is said to have never told a lie, and to have buried himself alive in 1458 A. D.; (v) Harbujī, a Ponwār Rājput of the Sānkla sept, who lived in the village of Bengti (close to Phalodi), where his cart is still an object of worship, and who is reported to have been a favourite of Rao Jodha; (vi) Jāmbhājī, a Ponwār Rājput of Harsar in Bikaner, who has been mentioned at page 90 *supra* as the founder of the creed of the Bishnois and who is supposed to have given Dūda (the fourth son of Rao Jodha) the wooden sword with which he captured Merta—see page 55; (vii) Mehājī, a famous chieftain of the Gahlot (or Sesodia) clan of Rājputs, whose praises are still sung by the Chārāns; (viii) Gogājī, a Chauhān Rājput who became a Musalmān and held sway from Hānsi to the Sutlej; he is said to have been killed in a battle with Fīroz Shāh II of Delhi at the end of the thirteenth century; and (ix) Jālandharnāthjī, an ascetic of renown belonging to the Nāth sect, one of whose descendants, Deonāth, was the founder of the great temple at Mahāmandir (near the capital) and for many years the spiritual director of Mahārājā Mān Singh. All the above

uncouth, profusely besmeared with paint, and of no artistic or archaeological value whatever, but they are interesting as showing how easily heroes and saints come to be ranked with and worshipped as gods by the Hindu masses.

An old palace, called the Ektambha mahal from its resemblance to a pillar, and a well-kept garden, watered from the Nāgādārī stream, are worthy of note, while about half a mile to the north-east is a place which is known to the people as Rāvan-kī-chaorī as being the spot where the marriage of Rāvana, the demon king of Ceylon, with Mandodarī, the daughter of the ruler of Mandor, was solemnised. Here will be seen the remains of a raised dais, at the back of which is a group of nine figures, each about eighteen inches in height and cut out of an isolated solid rock. The figures, which represent Ganapati and the Ashtmātri, are all standing, but their heads have been broken off; the peculiarity about the Ashtmātri is that, with the exception of the last—an image of Chāmūnda with eight hands—they alternately have two and four hands each. The pose and sculptured ornaments of these figures leave no doubt as to their early age. [J. Tod, *Annals and antiquities of Rājasthān*, Vol. I, pages 721—32 (1829); A. Cunningham, *Archæological Survey of Northern India*, Vol. XXIII; and *Progress Report of the Archæological Survey of India, Western Circle*, for the year ending 31st March 1907.]

Mallāni.—The largest district of the Jodhpur State, situated in the west with an area of 5,750 square miles. In 1901 it contained one town (Bārmer) and 464 villages, all held by a number of petty *jāgīrdārs* with the exception of one single village (Netrān) which is *khālsa*. The population decreased from 221,184 in 1891 to 172,330 in 1901, or by more than twenty-two per cent., and this was due to the famine of 1899-1900. At the last census about seventy-five per cent. of the inhabitants were Hindus, twelve per cent. Musalmāns, six per cent. Animists, and five per cent. Jains; the most numerous castes were Jāts (39,909); Bhils (11,732); Rājputs (11,394, including 1,404 Musalmāns); Mahājans (11,035); Brāhmans (9,409); Balais (8,033); Chākars (6,064); and Sheikhs (5,038). The salient features of the country are the sand-hills, which in some places rise to an altitude of three or four hundred feet; the northern and western portions form part of the desert stretching into Sind and Jaisalmer. Water is usually brackish and in some spots deadly to man or beast; wells and pools yield potable water only after the rains and become noxious by March, so that in the summer there is a great scarcity of water and the use of a wholesome well has to be paid for. The sandy wastes provide excellent grazing for the herds of camels, cattle, sheep and goats kept by a large migratory population, including some of the hardy Baloch tribes. The only river is the Lūni, which enters the district at Jasol and pursues a tortuous course of about eighty miles till it passes into Sānchor and thence to the Rann of Cutch. There are about forty *jhīls* or marshes in the vicinity of Bārmer, Takhtābād and Setrao, some of which cover an area of four or five hundred acres; in favourable seasons, wheat is grown in their

beds, and when they are dry they yield a good supply of water at a depth varying from eight to twenty-four feet. Fullers' earth is found in considerable quantities, and gypsum to a small extent; the principal manufactures are cloths of a mixture of cotton and wool, woollen blankets, small rugs of camel hair, millstones, and horse and camel saddlery. The horses of Mallāni are famed for their hardiness and ease of pace, and, though light-boned, will carry heavy weights; the best are bred in the villages of Nagar and Gūrha.

The soils may be divided into three classes, namely (i) sandy, known as *thal* and occupying three-fourths of the entire area; (ii) a hard sandy clay (*nayar*), but generally so salt and sterile as to nurture only grass which springs up with the rains and withers away almost at once; and (iii) patches of deposited soil (called *par*) lying at the foot of the limestone ridges. The last is in great request as crops can, at little expense, be grown on it twice a year, water for irrigation purposes being obtainable by digging shallow reservoirs in the surrounding limestone bed, but unfortunately there is very little of this soil. The chief crops are *bājra*, *mūng*, *moth*, *til* and cotton; wheat is sown on the banks of the Lūni and sometimes in the beds of certain marshes, but is rare elsewhere; barley and gram are practically unknown, but watermelons grow in wild profusion in the rains, and a gourd called *tumbī* is indigenous all over the district, particularly in the sandy portions. Agricultural statistics exist only for the *khālsa* area (44 square miles), of which about forty square miles are available for cultivation; the area ordinarily cropped is twenty-two square miles, *bājra* occupying about fifty-two, cotton twenty-two, the minor millets and pulses sixteen, and *til* nine per cent. The yearly land revenue paid by this *khālsa* village is approximately Rs. 4,000. The administration of the district is in the hands of a Superintendent, under whom are the *Hākim* or chief local officer, the Munsif who settles civil suits and disputes about land, and the *Risāldār* who is the head of the local police. There are four vernacular schools of long standing (at Bārmer, Chhotan, Gūdha and Jasol), besides several Mārwarī *posāls* and a couple of small hospitals (at Bārmer and Jasol).

Historically, the tract is very interesting, and justly claims to be the cradle of the Rāthor race in the west. Here, in the beginning of the thirteenth century, Rao Siāhji and his son Asthānjī, having conquered Kher (now a ruined village near Jasol) and the adjoining tract called Mewo from the Gohel Rājputs, planted the standard of the Rāthors amid the sand-hills of the Lūni. The eighth in succession from Siāhji was Rao Salkha, in whose time—about the middle of the fourteenth century—a separation took place. Salkha had three sons, namely Mallināth, Vīramdeo and Jet Mal. A portion of the tribe followed the fortunes of Vīramdeo, whose son Chonda captured Mandor from the Parihār Rājputs in 1381 and whose descendants ruled first there and subsequently at Jodhpur; the rest remained on the banks of the Lūni with Salkha's eldest son Mallināth, after whom the district of Mallāni is named.

Succession being by the law of gavelkind, the country became minutely subdivided among the descendants of Mallināth, and the dissensions and blood-feuds thereby created offered the chiefs of Jodhpur opportunities to interfere and establish an overlordship which continues to the present day. The district was for centuries one continual scene of anarchy and confusion, and the inhabitants were described as "more savage and lawless than the neighboring Khosās of the desert"; the Darbār, when called upon to repress their excesses, acknowledged its inability to do so, and under these circumstances it became necessary for the British Government to occupy Mallāni in 1836 and restore order by reducing the principal Thākurs. The territory was subsequently held in trust by Government, the rights of the Jodhpur chief being recognised, and, as the Darbār gave increasing evidence of sound administration, its jurisdiction has been gradually restored, namely military in 1854, civil in 1891, and criminal in 1898.

As already observed, the whole of Mallāni except one village consists of *jāgīr* estates, the principal being Jasol, Bārmer and Sindari held by descendants of Mallināth, and Nagar and Gūrha held by descendants of Jet Mal; the minor estates are Chhotan, Setrao, Bisāla and Siāni. All the *jāgīrdārs* pay a small yearly tribute (called *faujbal*) to the Jodhpur Darbār, which thus derives an income of about Rs. 18,000 including a few miscellaneous items. Among places of archaeological interest may be mentioned Kher (noticed in the article on Jasol below), Kerādu and Chhotan. The old name of Kerādu was Kerātakūpa, and the ruins of this ancient town extend for a little over a mile along the foot of a hill which is about eighteen miles north by north-west of Bārmer. The remains of many temples and mansions can be traced, but all of them except five fances are utter wrecks. The first is the largest, faces the west, and consists of a shrine, antechamber, hall and porch, but the entire roof, save that of the shrine, has completely gone. The temple appears to have been built in the earlier part of the Solanki period, and the inside walls of the porch possess three more or less mutilated inscriptions; one is dated 1153 A.D., refers itself to the reign of Kumārapāla of Gujārāt, and has been published in the *Bhaunagar Inscriptions*; another of 1161 A.D. gives an account of an entirely new Paramāra dynasty; while the third bears the date 1179 (of the same era), and records the installation of a new image by the wife of one, Tejapāla, a subordinate officer of a Chauhān Rājput called Madanabrahmā, who was himself a feudatory of the great Bhīmadeva II of Gujārāt. In the vicinity are three temples dedicated to Siva; they all face the west, and are of the same design. The fifth is a Vaishnava shrine and certainly the oldest temple here, but it is in a dilapidated condition. Two of the outside niches, facing the south and west, contain rather curious images of Vishnu; the first shows him seated on a *sinhāsan* with ten hands and a nimbus behind his head, while in the second he is riding the *garud* or eagle and has three faces, one of which has a tusk and consequently represents Varāha. The village of Chhotan

lies at the foot of a hill about twenty-eight miles south-west of Bārmer, and half way up this hill are the remains of three Sivaite temples. The first, which has evidently been rebuilt, consists of a shrine, a hall and two porches; there are three or four inscriptions on the pillars of the hall, but they are all modern except one which is dated 13 . . —the last two figures have disappeared—and refers to the reign of one Śrī Kānbadeva. Close by and to the north is a small but interesting shrine dedicated to Lakulisa, whose head, canopied by a seven-hooded cobra, appears on the door; the pillars and spire belong at the latest to the eleventh century, and an inscription dated 1308 A.D. tells of repairs carried out by Śrī Dharma-rāsi, the pupil of Śrī Uttamarāsi. The third temple is of about the same age as the last, and differs from the first in that it has three, instead of two porches; the spire and the roofs of the hall and porches have all disappeared. On the dedicatory block of the shrine door is a curious piece of sculpture, which perhaps represents an ornamental *lingam*, flanked by a male on one side and a female on the other, each of whom is in the act of decking it with a garland. Above are Siva in the middle, with Brahmā to the right and Viṣṇu to the left. [For a fuller account of the temples at Kerādu and Chhotan, see the *Progress Report of the Archaeological Survey of India, Western Circle*, for the year ending 31st March 1907, pages 40—43.]

Bārmer.—One of the principal estates in Mallāni, consisting of sixty-six villages held by five different families, all descended from Mallināth and known respectively as Raotāni (the first in rank), Sāhibāni, Kishnāni, Pophāni and Khimāni. The Rājputs of Bārmer, living, as they do, a great deal in the open air and being moderate in the use of both wine and opium, are of particularly fine physique. Fullers' earth is found at Kāpuri and other places in the estate, and is used locally as a hair wash; horses and cattle are bred in considerable numbers, and find a ready market at the fair held annually at Tilwāra (near Bālotra) in March.

The Thākurs of Bārmer reside at the town of the same name which is also the headquarters of the Mallāni district. It is situated in 25° 45' N. and 71° 23' E. on the Jodhpur-Bikaner Railway, 130 miles south-west of Jodhpur city. Population (1901) 6,064. The town is said to have been founded in the thirteenth century by a Rājā Bāhada, and to have been called after him Bāhada-mer (the *mer* or *meru*, that is to say, the hill-fort of Bāhada), since contracted to Bārmer. It is substantially built on the side of a rocky hill, on the summit of which are the remains of an old fort, and it possesses a post and telegraph office, a vernacular school, two Mārwārī *posāls*, a hospital with accommodation for four in-patients, and an ancient temple dedicated to Bālarikh (another name for the sun), the idol in which is of wood. The stone of the hill is largely used for building and roofing purposes, and the principal manufactures are millstones and camel-trappings. About four miles to the north-west are the ruins of Jūna or Jūna Bārmer, an old town which

appears to have had a very large fort on an adjacent hill, but portions only of the ramparts are now visible. The remains of three Jain temples will be found at a distance of some two miles to the south, and one of the pillars of the hall of the largest bears an inscription dated 1295 A.D. which mentions a *Mahārājakula Srī Sāmantha Sinhadeva* as ruling at *Bāhadameru*.

Jasol.—One of the principal estates in Mallāni consisting of seventy-two villages, held by two families claiming descent from Mallināth; the representative of one has the title of Rāwal, and of the other that of Thākur, and between them they pay a yearly tribute of Rs. 2,100 to the Jodhpur Darbār. The principal place in the estate is the village of the same name situated in 25° 49' N. and 72° 13' E., on the left bank of the Lūni river, nearly two miles from Bālotra station on the Jodhpur-Bikaner Railway. It is built partly on the slope of a hill, and possesses a post office, a couple of schools, a hospital with accommodation for two in-patients, and a bungalow for the use of officials. In 1901 the village of Jasol contained 2,543 inhabitants. About five miles to the north-west are the ruins of Kher, the old capital of Mallāni, and one of the first conquests of the Rāthors in Rājputāna, while to the south-west are the remains of another important town, Nagar. As these places decayed, Jasol rose and now contains the descendants of some of the earliest Rāthor settlers.

Mārot Hukūmat.—A district in the extreme north-east of the Jodhpur State, having an area of 498 square miles, of which about one-twelfth is *khālsa* or under the direct management of the Darbār. In 1901* it consisted of 109 villages containing 54,873 inhabitants, more than ninety-two per cent. of whom were Hindus, and the principal castes were Jāts (12,484); Balais (6,730); Rājputs (6,188, including forty-five Musalmāns); Brāhmans (4,602); Mahājans (4,183); and Gūjars (3,778). Wells are numerous, and both spring and autumn crops are grown; the land revenue realised by the Darbār averages Rs. 7,500 yearly. Agricultural statistics are available for only thirty-two square miles, of which about one-half is usually cultivated, *bājra* occupying fifty-three, the smaller millets and pulses thirty-five, and barley, wheat and *tīl* (chiefly the first) together nearly five per cent.

The headquarters of the district are at the village of the same name, situated at the south-eastern extremity of a small range of hills in 27° 6' N. and 75° 6' E., about eight miles north-east of Kuchāwan Road station, a junction of the Jodhpur-Bikaner and Rājputāna-Mālwa Railways. Population (1901) 3,899. The village possesses a post office and two schools.

Merta Hukūmat.—A district in the north-east of the Jodhpur State, having an area of 1,618 square miles of which nearly one-fourth is *khālsa*; in 1901 it contained one town (Merta) and 370 villages with a total population of 142,854, chiefly Jāts (22,990); Brāhmans

*The town of Kuchāwan and certain villages formerly included in the Sām-bhar hukūmat have recently been transferred to this district—see page 214 *infra*.

(17,761); Rājputs (13,716 including 655 Musalmāns); Balais (10,070); Mahājans (7,620); Baoris (4,874); Mālis (4,795); and Kunhārs (4,789). In about half of the district, wells containing sweet water are rather numerous, and much of the soil is a mixture of sand and clay; the tract may consequently be described as fairly fertile, and it yields to the Darbār a yearly land revenue of some Rs. 1,33,500. Agricultural statistics exist for an area of about 343 square miles, of which rather more than one-third is usually cultivated, the irrigated portion averaging twenty-six square miles; of the cropped area, *bājra* ordinarily occupies about twenty-six, *jowār* twenty-two, inferior millets and pulses nearly twenty, wheat and oil-seeds each ten, gram four or five, and barley between three and four per cent. There are generally two or three square miles under cotton and maize, and a few acres under tobacco and sugar-cane. The Lūni river flows for a few miles through the south-eastern corner, and the Jodhpur-Bikaner Railway traverses the centre of the district. The chief manufactures are cotton cloths, woollen blankets and mats, and earthen toys and vessels. The most important *jāgīr* estates in Merta are Alniawās and Rian, described below.

Alniawās.—An estate in the Merta district, consisting of four villages held by a Thākur who is one of the first class nobles of Mārwar and a Rāthor of the Mertia sept. The annual revenue is about Rs. 11,000, and a tribute of Rs. 1,058 is paid yearly to the Darbār. The estate was first conferred in 1708 by Mahārājā Ajit Singh on Kalyān Singh, whose successors have been:—Rām Singh, who took part in the battle fought at Merta about 1755; Lakhdīr Singh, who assisted Sūraj Mal, the Jāt chief of Bharatpur, when he was attacked by the Jaipur forces at Maonda (in the Torāwāti district of Jaipur) some eleven years later; Fakīr Dās, who fought against Sindhia at Tonga in 1787; Bharat Singh, who aided in defending the fort of Jodhpur in 1806 when it was besieged by the armies of Jaipur and Bikaner; Hanwant Singh; Ajit Singh; Udai Singh; Sheonāth Singh; and Sheo Singh. The last named is the present Thākur; he was born in 1879, succeeded by adoption in 1898, and was educated at the Mayo College. The chief place in the estate is the village of the same name, situated on the left bank of the Lūni in 26° 31' N. and 74° 20' E., about twenty miles south-east of Merta town. Population (1901) 2,224.

Merta Town.—The headquarters of the district of the same name, situated in 26° 39' N. and 74° 2' E., seventy-three miles by rail north-east of Jodhpur city; the nearest station was formerly Merta Road (on the Jodhpur-Bikaner Railway) nine miles to the north-west, but since 1905 the place has been connected with Merta Road by a branch line. Population (1901) 4,361. The town was founded by Dūda, the fourth son of Rao Jodha, about 1488 and was added to by Rao Māldeo, who built the wall (now somewhat dilapidated) and the fort (called after him Mālkoṭ). In 1562 Akbar took the place after an obstinate and sanguinary defence, but, about twenty years later, he restored it to the Jodhpur chief, Rājā Udai Singh.

Bakht Singh, and "was the first who sealed his devotion by his death." Bakht Singh, on succeeding to the *garhi*, resumed the estate for a short time, and then conferred it on Jawān Singh, who belonged to a junior branch of the family. Jawān Singh fought in the second battle of Merta (1756) and was wounded; his successors were:—Bakhtāwar Singh, who was wounded at the battle of Tonga (1787); Birdhi Singh, who took part in the third battle of Merta (1790) and assisted in defending Jodhpur in 1803-06, when the fort was besieged by the armies of Jaipur and Bikaner, aided by Amir Khān; Sheonāth Singh; Devi Singh; Gambhīr Singh; and Bijai Singh. The last named (the present Thākār) was born in 1872, succeeded his father in 1878, was educated at the Mayo College, and is a member of the State Council.

The chief place in the estate is the small town of the same name, situated close to the right bank of the Lūni in 26° 32' N.

and 74° 14' E., about sixty-eight miles north-east of Jodhpur city and sixteen south-east of Merta station on the Jodhpur-Bikaner Railway. The town is walled and lies at the western base of a rocky hill, on which stands a fort about 200 feet above the plain; the water-supply is obtained from numerous wells and a fine *bāoli* or reservoir which is about forty feet deep and pleasantly shaded by large trees. The place possesses a post office, and in 1901 contained 4,574 inhabitants.

Nāgaur Hukūmat.—A district in the north and north-east of the Jodhpur State, with an area of 2,608 square miles, of which rather more than one-fourth is *khālsa*. In 1901 it consisted of four towns (Kuchera, Lādnun, Mūndwa and Nāgaur) and 420 villages, but one of the towns (Lādnun) and several of the villages have since been transferred to the Dīdwāna district. At the last census the population numbered 167,759, Hindus forming more than eighty-five and Musalmāns eight per cent. of the total; the most numerous castes were Jāts (42,949); Brāhmans (16,117); Rājputs (11,146 including 978 Musalmāns); Mahājans (10,825); Balais (9,938); Mālis (7,800); Rebāris (6,393); Kumbhārs (4,951); and Chākars (4,513 including nine Muhammadans). The soil is sandy, and wells, besides being rather scarce and deep, generally contain brackish water; consequently, the more valuable crops are not cultivated to any large extent. The land revenue paid to the Darbār averages Rs. 1,45,000 a year. The area for which agricultural statistics exist is about 590 square miles, of which rather more than one-third is ordinarily cultivated, only two square miles being irrigated; of the cropped area *bājra* usually occupies forty-five, *jowār* twenty-five, the minor millets and pulses twenty, and *tīl* eight per cent. The district, however, possesses excellent grazing-grounds, and its milch cows and bullocks—particularly the latter—are very famous. Gypsum or *khādi* is found in considerable abundance throughout the tract and is used for cement, while yellow sandstone is quarried at Khātū and other places.

The history of the district is identical with that of its chief town Nāgaur, described below. In Akbar's time it was a *sarkār* or division in the *Sūbah* or province of Ajmer, and comprised thirty *parganas* including Dīdwāna, Lādnun, Merta, etc., which yielded an annual revenue of more than forty million *dāms* or about ten lakhs of rupees. Two villages—Kataotī and Manglod—are of archæological interest. At the former are a mosque, said to have been built by Akbar, and the *dargāh* of Shāman Shāh Pīr, some Muhammadan saint; while Manglod has a very old temple to Dadhmat Mātā with a Sanskrit inscription* dated 604 A.D., which records its repairs during the reign of a king Dhuhlāna. Both villages lie to the east of Nāgaur town, and the inscription above referred to is the oldest yet discovered in Mārwar.

The principal *jāgīr* estate in the district is Khinwasar, consisting of seventeen villages yielding an annual revenue of about Rs. 12,000,

*See the *Progress Report of the Archæological Survey of India, Western Circle*, for the year ending 31st March 1907, page 31.

and held by one of the first class nobles who belongs to the Karmsoth sept of the Rāthors (descended from Karm Singh, a son of Rao Jodha) and pays a tribute of Rs. 956 a year to the Darbār. The estate is apparently one of the oldest of the first class as it was granted by Rao Māldeo in 1561 to Mahesh Dās; the name of the present Thākur is Ranjīt Singh, and he resides at the village of Khinwasar which is situated in 26° 59' N. and 73° 25' E., about sixty miles north-east of Jodhpur city and twenty-eight west by south-west of Mündwa station on the Jodhpur-Bikaner Railway. Population (1901) 2,175. There is a post office here.

Mündwa.—A town in the Nāgaur district, situated in 27° 4' N. and 73° 49' E. on the Jodhpur-Bikaner Railway, eighty-nine miles north-east of Jodhpur city. Population (1901) 5,121. The place is a commercial mart of some importance, and is noted for its wooden toys and other fancy articles; it is the home of several prosperous Mārwarī traders having business connections in various parts of India, and possesses some handsome houses, a post office, an anglo-vernacular school, three or four Mārwarī *posāls*, and a garden which is irrigated from a large tank. A fair, instituted by Mahārājā Bakht Singh in honour of Śrī Krishna under the name of Girdhārī, is held in December and January and is attended by people from Bhiwāni (in Hissār) as well as from Mārwar; bullocks are sold in large numbers.

Nāgaur Town.—The headquarters of the district of the same name, situated in 27° 12' N. and 73° 44' E. on the Jodhpur-Bikaner Railway nearly one hundred miles north-east of Jodhpur city; it is very picturesque from all aspects, especially from the high ground two miles to the south-east. Population (1901) 13,377. The town is surrounded by a wall which is more than four miles in length, between two and a half and five feet thick, and on the average seventeen feet high; access is obtained by means of six gates, three on the southern side, and one each on the north, west and east. The battlements bear many Arabic and Persian inscriptions obtained from mosques demolished by Mahārājā Bakht Singh in order to repair breaches caused in warfare. The place possesses a post office, an anglo-vernacular school, several private schools, a hospital with accommodation for six in-patients, and a dāk-bungalow or resthouse; the streets and alleys are for the most part irregularly built, but contain many handsomely carved sandstone houses, the property of Seths or bankers. Only thirty years ago, some of the latter used to receive intimation of opium sales in Calcutta by telegrams to Ajmer, whence the news was flashed by means of mirrors stationed at different points to Nāgaur eighty-seven miles and from it to Bikaner; the monthly subscription for these messages was Rs. 50, and a banker told the Political Agent in 1876 that on the previous day he had received intelligence from Calcutta in one hour. The principal manufactures are brass and iron utensils, guitar strings, padlocks, ivory toys, camel saddles, lacquerware and dyed cloths. The water-supply is good and fairly abundant, and the climate generally salubrious, though extremes of temperature

are very great, the heat being intense in the summer and frost common in the winter.

Of numerous religious edifices, two Hindu temples and a mosque are specially noteworthy. The temple of Murlidar is remarkable as being virtually a double one, having two separate shrines; the *lingam* of Mahādeo and the statue of Krishna are side by side, encompassed by the same enclosure and spanned by the same pillars. The other temple is dedicated to Mātā and is nicely sculptured; it has two inscriptions dated respectively 1561 and 1602 A. D., but the building itself is much older. The mosque, which is said to have been constructed by Shams Khān (who was governor here) in the beginning of the fifteenth century, has the unusual number of five domes, but is in a very dilapidated condition. Another mosque, called the Atarkīn-kā-dargāh and situated outside the town, is deserving of notice as its gateway of light yellow stone is superbly carved, and a large ostrich's or bustard's egg hangs by a chain from the apex of the arch.

In the centre of, and rising above the town is an extensive fort with a double wall nearly a mile in circumference—the outer being twenty-five, and the inner fifty feet above the ground—and varying in thickness from more than thirty feet at the base to twelve at the top; it has six portals and two posterns. The principal objects of interest here are some palaces, a fountain with seventeen jets (dating from Akbar's reign,) a mosque erected by Shāh Jahān, and a cave claimed by both Hindus and Musalmāns as a place of retreat for their former saints.

Nāgaur is said to take its name from its traditional founders, the Nāga Rājputs, and was originally called Nāgapura or Nāga Durgā. It was held first by Prithwī Rāj Chauhān and next by the Muhammadan kings of Delhi till about the end of the fourteenth century when Rao Chonda seized it, but his son lost it and in 1416 Khizr Khān, one of the Saiyid kings, was in possession (with Shams Khān Dindāni as local governor) and routed Ahmad Shāh of Gujarāt who had come to besiege it. Subsequently, the place changed hands repeatedly. Rao Māldeo certainly recovered it, but had to surrender it to Akbar, who granted it for a short time to the chief of Bikaner and eventually restored it to Rājā Udai Singh. Again, Shāh Jahān and Aurangzeb undoubtedly held it for varying periods, and it would seem that it was permanently acquired by the Jodhpur family at the beginning of the eighteenth century. [A. Cunningham, *Archæological Survey of Northern India*, Vol. XXIII.]

✓ **Pachbhādra Hukūmat.**—A district situated more or less in the centre of the Jodhpur State, with an area of 854 square miles, of which about one-eleventh is *khālsa*. In 1901 it consisted of two towns (Bālotra and Pachbhādra) and 105 villages, and contained 39,427 inhabitants; the most numerous castes were Brāhmans (6,614); Mahājans (4,924); Balais (3,925); Rājputs (3,713 including two Musalmāns); and Jāts (2,933). The soil is sandy and the water generally saturated with salt; the river Lūni and the Jodhpur-

Bikaner Railway traverse the extreme southern portion of the district. Statistics relating to agriculture are available for only sixty square miles, of which about one-sixth is usually cultivated; of the latter, *baḍra* occupies fifty, *jowār* fifteen, wheat twelve and the minor millets and pulses eleven per cent., and there are generally a few acres under barley, cotton and *til*. The yearly land revenue realised by the Darbhār averages Rs. 13,200. The principal *jāgīr* estate, *Kanāna*, consists of three villages held by a *Thākūr* who is a Rāthor Rājput of the Karnot family and is entitled to the first class *tāzīm* from the Mahārājā of Jodhpur. The annual revenue is about Rs. 12,000, out of which Rs. 960 are paid yearly as tribute to the Darbhār. The estate was originally granted by Mahārājā Abhai Singh in 1724 to Abhai Karan, and is at present held by Jas Karan.

Bālotra.—A town in the Pachbhadrā district, situated on the right bank of the Lāni river in $25^{\circ} 50' N.$ and $72^{\circ} 15' E.$; it is a station on the Jodhpur-Bikaner line, seventy miles from Jodhpur city. Population (1901) 5,118. The town is built on a sand-hill and possesses a combined post and telegraph office, an anglo-vernacular school, a *Mārwārī posāl*, and a *hungalow* for officials on tour. The chief manufactures are dyed and stamped cloths. Just across the river, but in another district, is the village of Jasol, where there is a small hospital; while at Tilwāra, ten miles to the west, the famous horse and cattle fair is held yearly in March.

Pachbhadrā Town.—The headquarters of the district of the same name, situated in $25^{\circ} 55' N.$ and $72^{\circ} 15' E.$, about five miles east of the Pachbhadrā station on the Jodhpur-Bikaner Railway and eighty miles by rail from Jodhpur city. Population (1901) 3,194. The town has a post office, a vernacular school maintained by the Darbhār, and three private schools, in one of which English is taught. The water-supply fails nearly every summer, and has to be imported by railway. The place is also one of the hottest in India, the thermometer sometimes rising to 122° in the shade. Five miles to the west is the well-known salt source which was leased by the Jodhpur Darbhār to the Government of India in 1878 for an annual sum of 1.7 lakhs, and here are to be found a meteorological observatory and a hospital with beds for nine in-patients—both institutions being maintained by Government, and the hospital affording medical aid to the people of the town as well as to those engaged in the salt industry.

The salt-lake has an area of about ten square miles and, unlike that at Sāmbhar, is not dependent on the rainfall as the brine springs are perennial. According to local tradition, the valley was in former times a marsh in which salt was deposited during the dry and hot months, and the wild aboriginal tribes collected the commodity for their own consumption and for sale to the inhabitants of the adjoining desert. Some four hundred years ago, a Jāt called Pancha occupied a small hamlet, which was called after him Pancha-padra (subsequently corrupted to Pachbhadrā), when a man of the Kharwāl caste, named Jhānja, visited the place, and, noticing the formation

of the salt in the bed of the marsh and recognising the value of his discovery, settled here and commenced systematic work. He was soon joined by some of his kinsmen, and they at first proceeded on the old lines of collecting such salt as formed spontaneously, but eventually discovered that brine springs existed not far from the surface and accordingly dug a shallow pit so as to reach their level. A better kind of salt being thus obtained, they abandoned the old methods, and, later on, ascertained that the best crystals formed on the thorny branches of desert shrubs which were blown by accident into the pits. Experiments were made, and it was found that the shrub known as *morāli* (*Lycium euoprium*) was most suitable, because its twigs did not decay in the brine and its long thorns facilitated the formation of large crystals.

These alleged discoveries of Jhānja and his brethren form the basis of the methods of manufacture followed at the present time; indeed, no improvement has been found practicable. Pits of an average length of 230 feet, with their banks sloped to an angle of about 45° are dug in the bed of the source to a depth of eleven feet until the subterranean springs of brine have been tapped, and these become filled to a depth of about three feet with strong brine, varying in density from 20° Beaumé to saturation point. Crystallisation is promoted by throwing branches of *morāli* (above mentioned) into the pits as soon as the formation of an over-set of salt indicates that precipitation has commenced. During the great heat of April, May and June, the evaporation of the brine

Banjāras, but, with the extension of the Jodhpur-Bikaner Railway to Bālotra and the construction of the branch line to the works, very few of these wanderers visit the place, and practically all the salt is removed by rail. [F. Ashton, *The Salt Industry of Rājputāna in The Journal of Indian Art and Industry*, Vol. IX, January 1901.]

Pāli Hukūmat.—A district situated in the east and south-east of the Jodhpur State, with an area of 1,024 square miles, of which rather more than one-fifth is *khālsa*. In 1901 it consisted of one town (Pāli) and eighty villages, containing 43,889 inhabitants; the most numerous castes were Mahājans (6,175); Brāhmans (4,854); Rājputs (2,830); Balais (2,217); and Mālis (2,010). Wells are numerous, much of the soil is a sandy loam, and both spring and autumn crops are grown. Agricultural statistics are available for an area of 199 square miles, of which 34 square miles are usually cultivated (nine square miles being irrigated); of the total cropped area, *bājra* and *jowār* together occupy fifty-three per cent. (in almost equal proportions), wheat about twenty, oil-seeds twelve, barley five and gram three per cent. The Jodhpur-Bikaner Railway enters the district in the east and leaves it in the north-west, and the old Agra-Ahmadābād road runs through the south-eastern corner. The *khālsa* land revenue averages Rs. 49,800 a year, and the only *jāgīr* estate of importance—Kharwā—is noticed below.

Kharwā.—A estate in the Pāli district, consisting of eleven villages held by one of the principal nobles of Mārwar who is a Rāthor Rājput of the Jodha sept. The annual income is about Rs. 30,000, and a tribute of Rs. 2,270 is paid yearly to the Darbār. The estate is said to have been first granted by Mahārājā Jaswant Singh in 1657 to Ranchhor Dās, who was killed fighting at Delhi in 1679 or 1680. His successors have been Bhīm Singh; Pratāp Singh, wounded at Ahmadābād in 1731; Indra Singh; Sawai Singh, wounded at Merta in 1790; Mān Singh; Daulat Singh; Sāmant Singh; Lachhman Singh, who received the title of Rao Bahādur for services during the Mutiny and was a member of the State Council; and Fateh Singh. The last named (the present Thākur) was born in 1887 and succeeded in the following year. The principal place in the estate is the village of the same name, situated in 25° 40' N. and 73° 30' E., about six miles west of Awā station on the Rājputāna-Mālwa Railway and fifty-six south-east of Jodhpur city. Population (1901) 3,373.

Pāli Town (sometimes called *Mārwar Pāli*).—The headquarters of the district of the same name, situated in 25° 47' N. and 73° 19' E., on the right bank of the Bāndi river and on the Jodhpur-Bikaner Railway, forty-five miles south by south-east of Jodhpur city. Population (1901) 12,673. The town possesses a post office, an anglo-vernacular school maintained by the Darbār, five or six private schools, a hospital with accommodation for eleven in-patients, a couple of cotton-presses, and a dāk-bungalow; a tannery formerly existed here, but it was closed in 1904. The principal industries are copper working, ivory carving, cotton printing, and the dyeing of woollen, silk and cotton cloths; the water of the Bāndi is supposed to have some peculiar chemical

qualities which give a certain degree of permanency to the colours used by the dyers. A small establishment is kept up to look after the sanitary arrangements of the place, and the Darbār contributes Rs. 50 monthly towards the cost of the operations.

Pāli was held by a community of Brāhmans in grant from the Paramāra and Parihār Rājputs till the advent of the Rāthors from Kanauj (about 1212), when Rao Siāhji became its master. The Pāliwāl Brāhmans take their name from the town which, before the construction of the railway, was a very important trade centre; in 1836 it was visited by an outbreak of plague, the germs of which are supposed to have been imported in silks from China. It now comprises an ancient and a modern quarter, each containing several temples. One of the oldest is that dedicated to Somnāth, who is here represented by his symbol—the *lingam*—and is attended by two small sculptured stone images of Nandi, the sacred bull on which he rode; it is a very handsome building, remarkable on account of its exquisite mouldings, and is attributed to Kumārāpāla of Gujarāt, whose name and date (1143 A.D.) are legible in an inscription which it bears. The vast Jain temple called Naulākha is noteworthy, not only for its size, elaborate carving and strength as a defensive fort—it being surrounded by a set of outworks only accessible from within, save for one solitary entrance which is not quite three feet wide—but also because it has a mosque in its courtyard (probably erected to preserve it from Muhammadan vandalism).

Parbatsar Hukumat.—A district in the north-east of the Jodhpur State with an area of 840 square miles, of which about one-eighth is *khālsa* or under the direct management of the Darbār; in 1901 it consisted of 165 villages containing altogether 87,127 inhabitants, more than ninety per cent. of whom were Hindus. The principal castes were Jāts (21,158); Brāhmans (8,312); Bālās (6,035); Rājputs (5,991 including eighty-six Muslimāns); Gūjars (5,115); Mahājans (3,128); and Chākars (2,094). The country is much broken up by short ranges of hills and isolated knolls, some of which attain an altitude of more than 2,000 feet above the sea and are moreover fairly well wooded; the soil, though for the most part sandy, is productive, and both spring and autumn crops are grown. The yearly land revenue of the district (*khālsa* portion) is about Rs. 26,000. Agricultural statistics are available for ninety square miles, of which between one-third and one-fourth is usually cultivated; of the cropped area, *bājra* occupies about fifty, the minor millets and pulses twenty-five, *jowār* nine and barley seven per cent., and there are generally two or three hundred acres under oil-seeds, cotton and wheat. The Jodhpur-Bikaner Railway runs through the centre of the district past the important village of Makrāna, where marble* is quarried; serpentine and steatite are found in other parts.

The headquarters of the district are at the village of the same name which is situated in 26° 53' N. and 74° 46' E., close to the Kishangarh border and about twelve miles south of Makrāna station

* See page 115 *supra*.

on the Jodhpur-Bikaner Railway. Population (1901) 3,069. The only public buildings are the post office and the vernacular school. An important fair, known as the Tejāji-kā-melā, is held here annually in the month of Bhādon (August-September), and attracts a large number of traders from the Punjab, the United Provinces and Gujarāt, as well as from neighbouring States of Rājputāna; it lasts for ten days, and many bullocks and donkeys change hands. The way the fair came to be held here is that, in Mahārājā Bijai Singh's time, there was a very sharp *Hākim* at Parbatsar who found that the people of his district, especially the Jāts, went in great numbers to the fair at Sursara in Kishangarh and that a good income was derived by the Kishangarh Darbār in consequence: so, knowing that the chief object which took the Jāts to Sursara was to worship at Tejāji's shrine, he made up a story that Tejā had appeared to him in a dream and expressed a wish that in future he should be worshipped only at Parbatsar. The *Hākim* next had a figure of the hero made up, and ordered all the Jāts to attend the Parbatsar fair and give up the one in Kishangarh, threatening them with punishment if they disobeyed him.

About six miles to the west of Parbatsar is the hamlet of Kin-sariā, and perched on the top of a steep hill in the vicinity is the temple of Kaivāsa Mātā. The building has been so frequently repaired that very little of the original now remains; it is, however, interesting to the antiquarian as possessing on the front wall of its porch a Sanskrit inscription which, though rather weatherworn, appears* to bear the date 999 or 1,000 A.D. and to describe a new branch of the Chauhān dynasty, of which there was no previous record. A mile to the east, on the outskirts of the village of Khijārpur, are the remains of a Vaishnava shrine, which is believed to be nearly twelve hundred years old. The door of the shrine is intact, and the lintel has a representation of the *garud* (or eagle) pulling the tails of serpents, while below, at the bottom of the door-frame, are Gangā and Yamunā. The only other places of any archæological interest are Maglāna and Makrāna, each of which possesses a step-well. Maglāna is about ten miles north-east of Parbatsar, and the inscription, recently found there and since removed to Jodhpur, is dated 1215 A.D. and tells us that the well was excavated in the time of *Mahārājaputra Srī Jayanta*, a feudatory of *Balanadeva* who ruled at *Ranastambhapura* (that is to say, at Ranthambhor, a famous fort in the south-east of the Jaipur State). The step-well at Makrāna has its inscription *in situ*; it is in Persian, is dated A. H. 1061 (equivalent to 1650 A.D.), refers to one Mirza Alī Beg (perhaps a local governor), and warns all the lower castes, whether Muslimān or Hindu, against drawing water from this source. Mention is made of the "twenty-fifth" year of somebody's "auspicious reign," but if that of Shāh Jahān he intended, it may be noted that he ascended the throne of Delhi in 1627.

* See *Progress Report of the Archæological Survey of India, Western Circle*, for the year ending 31st March 1907, page 39.

Phalodi Hukūmat.—A district in the north of the Jodhpur State with an area of 2,624 square miles, of which between one-fifth and one-sixth is *khālsa*. In 1901 it contained two towns (Johāwat and Pbalodi) and seventy-one villages, having a total population of 59,619; the most numerous castes were Bishnois (8,575); Brāhmans (7,416); Mahājans (6,450); Rājputs (5,778 including 191 Musalmāns); Balais (4,073); and Jāts (3,811). The country is a sandy desert, and water is scarce. Agricultural statistics are available for an area of about 400 square miles, of which rather less than 88 square miles are ordinarily cultivated; of the cropped area, *bājra* occupies seventy-eight, the minor millets fifteen, and *jowār* between two and three per cent., while there are usually about 300 acres under wheat, sixty-eight under *tīl* and twenty under cotton. The land revenue realised by the Darbhār averages Rs. 30,300 a year.

Lohāwat.—A town in the Phalodi district, situated in 26° 59' N. and 72° 36' E., about fifty-five miles north by north-west of Jodhpur city. Population (1901) 5,322. It is a commercial mart of some importance, and the home of many enterprising Mār-wāri traders carrying on business in various parts of India. The principal manufactures are gold ornaments. The town possesses a post office and a vernacular school.

Phalodi Town.—The headquarters of the district of the same name, situated in 27° 8' N. and 72° 22' E., about seventy miles north by north-west of Jodhpur city. Population (1901) 13,924. In spite of its remote position, it has succeeded in outgrowing the more ancient towns of Pāli, Nāgaur and Kuchāwan—famous as cities of refuge in the old days—although they have for some years been served by a railway. Phalodi is a large and flourishing place, the home of many enterprising merchants who trade, in some cases, beyond the borders of India and bring back much wealth; it possesses several fine houses with beautifully carved sandstone fronts, a post office, an anglo-vernacular school, at least six Mār-wāri *posāls*, and a hospital with accommodation for three in-patients. The principal manufactures are metal utensils and *gandqs* or mats of camel hair.

The town is said to have been founded about the middle of the fifteenth century and, along with the district, was taken by Rao Māldeo nearly one hundred years later; it was granted to a chief of Jaisalmer (possibly Rāwal Bhīm) by Akhar, and was subsequently included for a short time in Bikaner territory, but Mahārājā Ajit Singh eventually recovered it. The fort, attributed to Hamir Singh, a great-grandson of Rao Sūja, is large and well-built, with walls over forty feet high; it has a capacious reservoir for water and some fine palaces, but is commanded by the Ekka hill about three miles to the south (one of the Trigonometrical Survey stations). Some ten miles to the north of the town is a large depression called the Phalodi salt source, five miles in length by three in breadth; it was leased to the Government of India in 1878 and worked till 1892, when it was closed as the operations were found to be unprofitable owing to the distance from the railway.

Sāmbhar Hukūmat.—A district in the north-east of the Jodhpur State with an area of 462 square miles, of which about one-third is the joint property of the Jodhpur and Jaipur Darbārs, namely the town of Sāmbhar and the twelve villages attached thereto. In 1901 the district was made up of the tract just mentioned and contained 14,877 inhabitants, 7,438 of whom were shown in the census tables as belonging to Jodhpur and the rest to Jaipur; but in 1902-03 the Nāwa *hukūmat* (comprising two towns, twelve villages and 24,960 inhabitants) was abolished as a separate charge and amalgamated with Sāmbhar, which thus consists at the present* time of two towns (Kuchāwan and Nāwa) and twelve entire villages *plus* a half share of Sāmbhar and its twelve villages. The population of this tract in 1901 was 32,398, and the principal castes were Mahājans (3,837); Brāhmans (2,758); Rājputs (2,197 including 401 followers of Islām); Jāts (2,010); Regars (1,558); and Sheikhs (1,432). The dual jurisdiction above referred to arises from the two States (Jodhpur and Jaipur) having jointly acquired the town and lake of Sāmbhar with sixty dependent villages about two hundred years ago; subsequently, first one and then the other, taking advantage of any temporary weakness on the part of its neighbour, appropriated an outlying village here and there until, as already stated, only twelve, besides the town, remained in joint possession.

The district is traversed by the Rājputāna-Mālwa and Jodhpur-Bikaner Railways, which meet at Kuchāwan Road, and the yearly land revenue realised by the Darbār is about Rs. 4,650. No agricultural statistics exist for the joint villages, but the chief crops are said to be *bājra* and barley; in the old Nāwa *hukūmat* returns are available for only ten square miles, of which rather more than one-third is usually cultivated, the principal crops being *bājra*, minor millets, barley and wheat, with a little cotton, maize and tobacco. The only important *jāgīr* estate, Kuchāwan, and the famous salt-lake are both described below.

Kuchāwan.—An estate consisting of nineteen entire villages and a one-third share in a twentieth, situated in different† *hukūmats* in the north-east of Mārwar, and held by one of the first class nobles who belongs to the Mertin sept of the Rāthor Rājputs. The annual income is about Rs. 50,000, and a tribute of Rs. 3,416 is paid yearly to the Darbār. The estate was first granted by Mahārājā Abhai Singh in 1727 to Zālīm Singh, whose successors have been Sabal Singh; Sūraj Mal; Sheonāth Singh, who was permitted by the Darbār to strike silver coins of the Ajmer type, known as Iktisanda (see page 143 *supra*); Ranjit Singh; Kesri Singh, who was a Rao Bahādur and a C.I.E.; and Shér Singh, the present Thākur, who was born in 1836, succeeded his father in 1890, received the title of Rao Bahādur in 1900, and is a member of the State Council.

* Since this was written there has been a further change, the town of Kuchāwan and some of the villages having been transferred to the Mārot *hukūmat*.

† Six in Parbatsar, six in Merta, three in Didwāna, and the rest in Mārot.

The principal place in the estate is the walled town of the same name, situated in $27^{\circ} 9' N.$ and $74^{\circ} 52' E.$, about eight miles north of Nārāyaṇpura station on the Jodhpur-Bikaner Railway. Population (1901) 10,749. The place is noted for the manufacture of muskets, swords and padlocks, and possesses a post office, several private schools, and a strong and well-built fort containing some handsome palatial residences. To the south of the town are two saline depressions, miniatures of the Sāmbhar lake in appearance and characteristics, but the small amount of salt which forms in them is so inferior

74° 54' and 75° 14' E., and is distant, by railway, fifty-three miles north-east of Ajmer and 230 miles south-west of Delhi. It is situated nearly 1,200 feet above sea-level, and when full is about twenty miles in length (from south-east to north-west), from two to seven miles in breadth, and covers an area of about ninety square miles. In the hot months its bed is generally quite dry but, after exceptionally heavy rains, it contains water throughout the year. The average annual rainfall at the town of Sāmīkhar is nearly twenty inches, while that at Nāwa is reported to be less than fourteen. The lake is dependent for its water-supply on three rivers which empty themselves into it; of these, two come from the spurs of the Arāvalli hills to the west, and the third from the country to the north. The surrounding tract is sandy and sterile, but the view of the lake in the hot weather is very striking. Standing on the low sandy ridges to the south, one sees what looks like a great sheet of glittering snow, with sometimes a pool of water here and there, but what appears to be frozen snow is a white crisp efflorescence of salt.

According to local tradition, the goddess Sakambhari (the consort of Siva), in return for some service done her, converted a dense forest into a plain of silver, and subsequently, at the request of the inhabitants who dreaded the cupidity and strife which such a possession would excite, transformed it into the present salt-lake which was named Sām-bhar (a corruption of Sakamhar) after her. The source is said to have been worked by Rao Mūldeo for a short time and by the imperial administration of Akhar and his successors until it was acquired by its present owners, the chiefs of Jodhpur and Jaipur; the western half belongs entirely to the former, and the eastern half, including the town, is the joint property of the two States. The lake passed for a time into the possession of the Mmrāthās and Amīr Khān, while from about 1835 to 1843 the British Government, in order to repay itself a portion of the expenses incurred in restoring order in Shekhāwati and the neighbouring districts, took the salt-making into its own hands. Finally in 1870 it was leased to Government for an annual payment of seven lakhs (4½ lakhs to Jodhpur and the rest to Jaipur) on the condition that, if the sales of salt exceeded 1,725,000 maunds (about 63,400 tons) in any year, forty per cent. of the sale price of such excess would be paid to the States as royalty. Under arrangements made in 1884, Jodhpur receives five-eighths and Jaipur three-eighths of the total royalty payable; and, in addition, a certain quantity of salt, free of all charges, is delivered yearly to each of them, namely Jodhpur 14,000 and Jaipur 7,000 maunds.

Including about 74,000 tons taken over when the lease was executed, the quantity of salt manufactured to the end of March 1906 was approximately 4,658,990 tons, or a yearly average of about 126,000 tons; the quantity disposed of during the same period, including that delivered free of cost under treaty arrangements, wastage, etc., was about 4,589,215 tons. The receipts from sale of salt have been 349½ lakhs, and the expenditure including Rs. 253,16,203 on account of that portion of the treaty and royalty payments which

is debitable to price under the orders of Government, 309½ lakhs, leaving a credit balance on the 1st April 1906 of 39½ lakhs or about £263,300. The average cost of extraction and storage per maund has been rather more than seven pies (or one halfpenny), or about one rupee per ton. Duty was first levied at the lake on the 1st October 1878, when the customs line was abolished. Between the 1st April 1879 and the 31st March 1906, the gross receipts from all sources have been nearly 2,633½ lakhs and the total expenditure 302 lakhs, leaving a surplus of more than 2,331 lakhs (over 15½ million pounds sterling). The average yearly net receipts have thus been 86½ lakhs or about £575,500.

Salt is obtained by three methods, namely from permanent works constructed in the bed of the lake and called *kyārs*; from shallow solar evaporation pans of a temporary nature constructed on the lake-shore; and from enclosed sections of the bed on which salt forms, so to speak, spontaneously. In 1905-06 about 306,000 labourers of both sexes were employed on the extraction and storage of *kyār* salt and the storage of pan salt, and the average daily earnings were nearly five annas per head. The castes engaged in the industry are Balais, Barārs, Gūjars, Jāts, Kasais (butchers), Khatiks, Kumbhārs, Mālis, Mughals, Pathāns and Regars, and nearly all permanently reside in the neighbourhood. There are three railway stations on the lake—at Sāmbhar, Gūdhā, and Kuchāwan Road or Nāwa—and the line runs into all the principal manufacturing works or walled enclosures; the salt is stored close to the line and loaded direct into the railway wagons; it is largely consumed in the United Provinces, Rājputāna, Central India and the Punjab south of Karnāl, and it also finds its way into the Central Provinces, Behār and Nepāl.

The lake has been observed to furnish diminished quantities of salt during the last few years, but samples of mud, taken at depths of from four to twelve feet of the surface, have recently been found on analysis to contain six per cent. of salt, and from this fact it is roughly estimated that in the upper twelve feet of the lake-silt the accumulated salt amounts to just one million tons per square mile. As the total quantity removed by artificial means since the commencement of the British lease in 1870 has been but a little more than four and a half million tons, the system of manufacture has resulted in only a small inroad into the total stocks. To determine the origin of the salt and the prospective resources of the lake, a special investigation is being conducted by the Geological Survey of India, and the first stage has been completed. Borings made in the lake-bed at three places show that the thickness of the silt varies from sixty-one feet at the eastern end (near Sāmbhar town) to seventy near the centre (at the so-called *khasāna*) and seventy-six feet at the north-west close to Nāwa, and that the rocks below this silt are, in each case, schists of the kind cropping up around the edges of the lake, and forming the hills belonging to the Arāvalli series in the neighbourhood. It is therefore considered that the salt resources of Sāmbhar are confined to this body of silt filling in a depression of the Arāvalli schists and gneisses,

and that the soluble compounds of sodium stored in the silt have accumulated by the evaporation of the water brought in every year by the rivers which are in flood after heavy rains. The concentration of common salt and of the other less abundant sodium-compounds associated with it has been effected in a manner common to areas of internal closed drainage in all arid regions. There is nothing to show a past inroad of the ocean, and no rock-salt beds exist in the geological formation of the area. [F. Ashton, *The Salt Industry of Rājputāna* in *The Journal of Indian Art and Industry*, Vol. IX; and *Records of the Geological Survey of India*, Vol. XXXII, Part II.]

Sānchor Hukūmat.—A district in the south and south-west of the Jodhpur State, with an area of 1,776 square miles, of which only about 98 square miles are *khālśa*. In 1901 it consisted of 231 villages containing 70,401 inhabitants, and the most numerous castes were Balais (7,933); Rājputs (7,256 including 896 Musalmāns); Brāhmans (6,535); Pātels (5,234); Rebāris (4,840); Bhils (4,286); Bishnois (4,033); and Mahājans (4,023). The Lūni attains its greatest breadth in this district and occasionally overflows its banks, leaving an alluvial deposit (*rel*) on which good crops of wheat are grown; in the south near Bhatki is a *jhāl* or marsh which covers an area of forty or fifty square miles in the rainy season, and its bed, when dry, is cultivated with wheat and sometimes gram. In the *khālśa* villages about 94 square miles are available for cultivation, and the area usually cropped is fifty-six square miles, of which *bājra* occupies sixty-four, oil-seeds ten, and wheat from two to three per cent. The land revenue realised by the Darbār averages Rs. 13,000 yearly. The cattle of Sānchor, particularly the cows, are famous and sell for from Rs. 40 to Rs. 200 each.

The headquarters of the district are at the village of the same name, situated in 24° 45' N. and 71° 46' E., about 132 miles south-west of Jodhpur city. Population (1901) 2,066. The place possesses a post office, a vernacular school, a Mārwarī *posāl* and a hospital, the last having been recently transferred here from Bhatki; the principal manufactures are brass utensils and woollen mats. In the vicinity are mounds of ruins among which massive bricks and huge blocks of richly sculptured stone have been found. The village and district formerly belonged to the Paramāras, and next to the Chauhāns who migrated here from Nāḍol about the end of the twelfth century; Rao Māldeo held possession for a time, but the tract was not permanently acquired by the chiefs of Jodhpur till the end of the seventeenth century.

Sānkra Hukūmat.—A district in the north-west of the Jodhpur State, with an area of 1,279 square miles; in 1901 it consisted of one town (Pokaran) and seventy-one villages—all of which are held by *jāgīrdārs*—and contained 25,960 inhabitants, chiefly Rājputs (5,454 including 251 Musalmāns); Brāhmans (2,617); Balais (2,279); Jāts (1,874); Mahājans (1,284); and Bishnois (1,101). The entire tract is sandy and sterile, and only rain crops—mostly *bājra* and *moth*—are grown; good riding camels are, however, bred here. The headquar-

ters of the district are at the village of the same name, situated in 26° 45' N. and 71° 38' E., close to the Jaisalmer border and about one hundred miles north-west of Jodhpur. Population (1901) 755. There is a post office here.

Pokaran.—A *jāgīr* estate in the Sānkra district, consisting of one hundred villages (including the town) held by a Rāthor Rājput of the Champāwat sept (*i.e.* of the branch claiming descent from Champa, a brother of Rao Jodha), who is the *pradhān* or premier noble of the Jodhpur State and, as such, enjoys the privilege of attesting all grants of land or villages made by the Darbār, and is entitled to a seat on the *khurās*, that is to say, just behind the Mahārājā on an elephant, whence, on State occasions, he flourishes the *morchhal* or peacock feather fly-whisk over his chief's head. The annual income of the Thākūr is about a lakh, and a tribute of Rs. 5,929 is paid yearly to the Darbār. The estate, which is said to be called Pokaran because it contains five (*pok*) salt-marshes (*rann*), was originally granted by Mahārājā Abhai Singh in 1728 to Mahā Singh, who was succeeded by Devī Singh, a son of Mahārājā Ajit Singh; Sabal Singh, who was killed while attacking the town of Bilāra; Sawai Singh, who took part in the battle of Tonga (1787) and was assassinated by the notorious Amīr Khān at Nāgaur in 1808; Sālīm Singh; Bhabhūt Singh; Gumān Singh; and Mangal Singh. The last named (the present Thākūr) was born in 1869, succeeded by adoption in 1877, was educated at the Mayo College, and is a Rao Bahādūr and a member of the State Council.

The town of Pokaran is situated in 26° 55' N. and 71° 55' E., about eighty-five miles north-west of Jodhpur city and sixty-five east of Jaisalmer town. It has a post office, an anglo-vernacular school and a dispensary, and, in 1901, contained 7,125 inhabitants; it stands on low ground closed in by hills to the north, south and west, and water is both plentiful and good. The small fort is well-built and strong in appearance, but is quite commanded by the adjacent hills. About two miles away are the ruins of Sātālmer, a village founded by Sātāl, the eldest son of Rao Jodha, about the end of the fifteenth century, but dismantled by Rao Māldeo to find material for the Pokaran fort. The site of Sātālmer is still marked by a conspicuous Jain temple and the monuments raised to the memory of the deceased members of the Thākūr's family. Close to the town is a salt-marsh about four miles in length by two in breadth, with brine about seven feet below the bed; salt was manufactured in the past, but the position of the source in a desert country remote from the railway prevents it from being profitably worked. About ten miles to the north of Pokaran is the village of Rāmdeo, founded by and called after Rāmdeo, *a famous saint in these parts; a largely attended fair is held here yearly in Bhādon (August-September).

Sheo Hukumat.—A district in the west of the Jodhpur State, with an area of 2,004 square miles, of which about one-seventh is *khālsa*. In 1901 it contained sixty-five villages and 24,405 inhabi-

tants, and the most numerous castes were Rājputs (6,372 including 1,340 Musalmāns); Balais (3,061); Jāts (2,107); Sheikhs (1,813); Brāhmans (1,125); and Mahājans (1,052). The country is a desert and, of the *khālsa* area available for cultivation (240 square miles), only about one-sixteenth is ordinarily cultivated, *bājra* being practically the only crop grown. The land revenue paid to the Darbār is approximately Rs. 5,250 a year. Camels are bred in large numbers, and those of the Rāma Thalia strain are the best in Jodhpur for riding purposes, possessing both speed and staying power. The headquarters of the district are at the village of the same name, situated in 26° 12' N. and 71° 15' E., about 115 miles almost due west of Jodhpur city and thirty-two north of Bārmer station on the Jodhpur-Bikaner Railway. Population (1901) 634. A post office and a vernacular school are maintained here.

Shergarh Hukūmat.—A district in the north-west of the Jodhpur State, with an area of 1,456 square miles, of which only about one-sixteenth is *khālsa*. In 1901 it contained eighty villages, inhabited by 56,921 persons, chiefly Rājputs (19,075 including sixty-six Musalmāns); Balais (6,131); Mahājans (4,288); Brāhmans (3,590); and Jāts (3,515). The *khālsa* villages pay a yearly land revenue of about Rs. 4,300 to the Darbār. Agricultural statistics are available for an area of eighty square miles, of which nearly one-third is usually cultivated, and of this again, *bājra* occupies four-fifths and inferior food grains the rest, with the exception of some forty or fifty acres in which cotton is generally grown. As in Sānkra, good riding camels are bred in large numbers. The headquarters of the district are at the village of the same name which is situated in 26° 20' N. and 72° 18' E., about forty-five miles west of Jodhpur city. It is surrounded by sand-hills, and possesses a post office and a vernacular school. Population (1901) 1,884.

Siwāna Hukūmat.—A district situated in the southern half of the Jodhpur State, with an area of 760 square miles, of which rather more than one-tenth is *khālsa*. In 1901 it contained 112 villages and 53,931 inhabitants, the most numerous castes being Mahājans (8,121); Rājputs (7,223 including sixty-nine Musalmāns); Brāhmans (6,900); Balais (5,161); Pātels (4,754); Rebāris (4,001); and Bhils (2,362). The Lūni river flows through the northern portion, and here the soil is sandy; to the south, the country is much broken up by ranges of hills, some of which are fairly well wooded and occasionally contain a few black bears. The district yields to the Darbār a yearly land revenue of about Rs. 6,120. Agricultural statistics are available for an area of nearly forty-four square miles, of which one-sixth is usually cultivated; *bājra* occupies sixty, the minor millets and pulses about eight, and wheat seven per cent. of the cropped area, while barley, cotton, *jowār* and oil-seeds are all grown to a small extent.

The headquarters of the district are at the small town of the same name, situated in 25° 38' N. and 72° 26' E., about sixty miles south-west of Jodhpur city, and entirely surrounded by

hills, those to the south-west attaining an elevation of 3,199 feet above the sea. Population (1901) 3,066. The place contains a post office and a vernacular school. It has been identified by some writers as the *Xoāna* of Ptolemy, "a place in the country of the Bhaolingas between the desert and the Arāvallis." The fort on a hill to the west is approached by a circuitous ascent of nearly five miles, and has more than once been besieged by the Muhammadans. In the *Tārīkh-i-Alāi* we are told that in July 1308 Alā-ud-dīn set out on his expedition against Siwāna, "a fort situated on an eminence, one hundred *pārsangs* from Delhi, and surrounded by a forest occupied by wild men, who committed highway robberies." "Sātal Deo, a *gabr*" (pagan), "sat on the summit of the hill-fort, like the *sīmurgh*" (a fabulous bird) "on the Caucasus, and several thousand other *gabrs* were also present, like so many mountain vultures. The western mangonels were placed under the orders of Malik Kamāl-ud-dīn Garg (the wolf), and some of the garrison, in attempting to escape to the jungles, were pursued and killed." A few days later, Sātal Deo was slain and the king returned to Delhi. The next mention of the place by the Musalmān historians is in the *Tārīkh-i-Sher Shāhi*, where it is related that Rao Māldeo, having been defeated by Sher Shāh, retired "to the fort of Siwāna on the borders of Gujarāt." Lastly, we learn from the *Tabakāt-i-Akbarī* and the *Akbar-nāmah* that the place was besieged for a long time (in or about the year 1574) by Shāh Kulī Khān, Jalāl Khān, Rai Singh of Bikaner and others—all lieutenants of Akbar who failed to conduct their operations successfully, and one of whom (Jalāl Khān) met his death—and that eventually Shāhbāz Khān was given the command and took the fort in a very short time.

Sojat Hukūmat.—One of the eastern districts of the Jodhpur State and one of the most fertile, possessing numerous wells and a good deal of clayey soil on which both spring and autumn crops are grown. It has an area of 1,172 square miles and, in 1901, consisted of one town (Sojat) and 212 villages containing 109,833 inhabitants; the principal castes were Mahājans (12,811); Brāhmans (10,989); Rājputs (8,687 including forty-four Mnsalmāns); Balais (8,178); Sirvis (5,206); Chākars (3,952); Jāts (3,408); Chamārs (3,323); Rebāris (3,310); and Mālis (3,035). The *khālśa* villages have an area of nearly 336 square miles and yield a yearly land revenue of about Rs. 68,200 to the Darbār. Agricultural statistics are available for an area of 211 square miles of which one-fifth is usually cultivated, and, of the latter, *jowār* occupies thirty, *bājra* twenty-one, wheat and oil-seeds each about twelve, and barley ten per cent.; cotton, gram and maize are all grown, but not on any large scale. Sandstone is abundant, and lead mines exist at several places but are not now worked; copper and zinc are said to have been obtained in former days. The Rājputāna-Mālwa Railway runs through the district from north-east to south-west, and the Jodhpur-Bikaner line starts from one of its stations (Mārwar Junction). Of the numerous *jāgīr* estates, the two most important (Awā and Kantālia) are described in

separate articles below, and another is deserving of mention, namely Bagri.

The Bagri estate consists of seven villages held by one of the first class nobles who is a Rāthor Rājput of the Jetāwat family, claiming descent from Jet Singh, a brother of Rao Jodha. The annual income is about Rs. 15,000, and a tribute of Rs. 1,200 is paid yearly to the Darbār. The estate is said to date from 1461 when it was conferred by Rao Jodha on Akhai Rāj, and since then there have been fifteen Thākurs, including the present holder, Pratāp Singh. From the time of Mahārājā Bakht Singh, the Thākur of Bagri has enjoyed the privilege of marking with blood drawn from his own thumb the forehead of each new chief of Jodhpur at the time of installation, and of girding on his sword. The principal place in the estate is the village of the same name, situated in 25° 54' N. and 73° 49' E., about four miles north-east of Sojat Road station on the Rājputāna-Mālwa Railway. Population (1901) 4,313. The village has a post office and a private school, and is noted for its lacquer-ware.

Awā.—An estate in the Sojat district, consisting of fifteen villages held by one of the leading nobles of Mārwar who is a Rāthor Rājput of the Champāwat sept. The annual income is about Rs. 30,000, and a tribute of Rs. 1,280 is paid yearly to the Darbār. It was first granted by Mahārājā Ajit Singh in 1706 to Tej Singh, whose successors have been:—Harnāth Singh; Kushāl Singh; who served in the expedition against Ahmadābād in 1317 and died fighting for Bakht Singh against Mahārājā Rām Singh at Merta in 1752; Jet Singh, who was treacherously murdered by order of Mahārājā Bijai Singh a few years later; Sheo Singh, who died of wounds received in the battle of Merta in 1790; Mādho Singh; Bakhtāwar Singh; Kushāl Singh; Devī Singh; Shambhu Singh; and Pratāp Singh.

The last named is the present Thākur; he was born in 1885 and succeeded his father in 1897. The principal place in the estate is the village of the same name, situated in 25° 37' N. and 73° 39' E., five miles south-east of Awā station on the Rājputāna-Mālwa Railway. Population (1901) 2,580. Besides a post office, there is an ancient temple to Mahādeo with four inscriptions bearing dates ranging from 1072 to 1203 A.D.

Kantālia.—An estate in the Sojat district, consisting of twelve villages yielding about Rs. 16,000 annually and held by one of the principal nobles of Jodhpur who is a Rāthor Rājput of the Kūmpāwat sept and pays a yearly tribute of Rs. 1,144 to the Darbār. It was originally granted in 1645 by Mahārājā Jaswant Singh to Bhao Singh, and has since been held by Bakht Singh, who was wounded at Ahmadābād in 1731; Sangrām Singh, who was wounded in the battle of Merta (1790); Kushāl Singh; Shambhu Singh; Gobardhan Dās; and Arjun Singh. The last named is the present Thākur; he was born in 1861 and succeeded by adoption in 1886. The principal place in the estate is the village of the same name, situated in 25°

47' N. and 73° 51' E., seven miles south-east of Sojat Road station on the Rājputāna-Mālwa Railway. Population (1901) 2,533. A school of the indigenous type is maintained here.

Sojat Town.—The headquarters of the district of the same name, situated in 25° 56' N. and 73° 40' E. on the left bank of the Sukri river, a tributary of the Lūni, and about seven miles north-west of Sojat Road station on the Rājputānā-Mālwa Railway. Population (1901) 11,107. The town is walled, and possesses a post and telegraph office, two anglo-vernacular schools (one of which is maintained by the Darbār and the other by the Aryā Samāj), four or five private schools, a hospital with accommodation for four in-patients, and a dāk-bungalow. The principal manufactures are saddles, bridles, swords, daggers and cutlery, and there is a considerable trade in cotton, wool, grain and drugs. Sojat is a very ancient place and is said to take its name from the local goddess, Sejal Mātā; it was once depopulated, but was reoccupied in 1054 and passed into the possession of the Rāthors about four hundred years later. The town suffered severely from plague in 1836, when it was infected by hundreds of refugees[from Pāli.

BIBLIOGRAPHY.

- A. DOW.—*History of Hindustān*, London, 1812.
- W. HAMILTON.—*A description of Hindustān*, London, 1820.
- J. G. DUFF.—*History of the Marāthās*, London, 1826.
- J. BRIGGS.—*History of the rise of the Muhammadan power*, London, 1829.
- J. TOD.—*Annals and antiquities of Rājasthān*, London, 1829–1832.
- J. MALCOLM.—*Memoir of Central India including Mālwa* London, 1832.
- J. SUTHERLAND.—*Sketches of the relations subsisting between the British Government in India and the different Native States*, Calcutta, 1837.
- M. ELPHINSTONE.—*History of India*, London, 1841.
- J. FERGUSSON.—*Picturesque illustrations of ancient architecture in Hindustān*, London, 1848.
- W. ERSKINE.—*History of India*, London, 1854.
- Rājputāna Agency administration reports*, annually from 1865-66.
- H. G. KEENE.—*The Mughal empire*, London, 1866.
- H. M. ELLIOT.—*History of India—Muhammadan period*, Vols I—VIII, London, 1867-77.
- Reports on dispensaries, jails and vaccination in Rājputāna* annually from 1872-73.
- H. BLOCHMANN and H. S. JARRETT.—*Ain-i-Akbarī*, Calcutta, 1873-94.
- G. B. MALLESON.—*The Native States of India*, London, 1875.
- C. K. M. WALTER.—*Gazetteer of Mārwar and Mallāni*, Calcutta, 1877.
- General report on the salt-producing capabilities of the State of Jodhpur*, Calcutta 1877.
- Rājputāna Gazetteer*, Vol. II, Calcutta, 1879.
- Rājputāna Census Reports*, 1881, 1891 and 1901.
- Report on the administration of the Mārwar State*, annually from 1884-85.
- E. C. BAYLEY.—*Local Muhammadan dynasties—Gujarāt*, London, 1886.
- Great Trigonometrical Survey of India*, Vol. VII-A., Dehra Dūn, 1887.
- A. CUNNINGHAM.—*Archæological Survey of India*, Vol. XXIII, Calcutta, 1887.
- Report of the Forest administration in the Jodhpur State*, annually from 1889-90.

- F. BERNIER.—*Travels in the Mughal Empire* (revised edition), Westminster, 1891.
- Report on the census of Mārṡār and Mallāni taken in 1891*, Vols. I and II, Jodhpur, 1891 and 1894.
- C. U. AITCHISON.—*Collection of treaties, engagements, and sanads*, Vol. III, Calcutta, 1892 (under revision).
- W. W. WEBB.—*Currencies of the Hindu States of Rājputāna*, Westminster, 1893.
- SEKHDEO PRASAD.—*The Rāthors, their origin and growth*, Allahābād, 1896.
- Report on the relief operations undertaken in the Western Rājputāna States during the scarcity of 1896-97*, Jodhpur, 1897.
- A. ADAMS.—*The Western Rājputāna States*, London, 1899.
- J. FERGUSSON.—*History of Indian and eastern architecture*, London, 1899.
- C. M. DUFF.—*Chronology of India*, Westminster, 1899.
- SEKHDEO PRASAD.—*Final report of the famine relief operations in Mārṡār during 1899 and 1900*, Jodhpur, 1900.
- Report on the famine in the Native States of Rājputāna in 1899-1900*, Ajmer, 1901.
- F. ASHTON.—*The salt industry of Rājputāna*—see *The Journal of Indian Art and Industry*, Vol. IX, London, 1901.
- Review of the famine relief operations in the Native States of Rājputāna, 1901-02*, Ajmer, 1903.
- Chiefs and leading families in Rājputāna*, Calcutta, 1903.
- S. S. JACOB.—*Note on irrigation in the Jodhpur State*, Ajmer, 1903 and 1905.
- V. A. SMITH.—*Early history of India*, Oxford, 1904.
- Report on the famine relief operations in Mārṡār for the year 1905-06*, Jodhpur, 1906.
- Progress Report of the Archaeological Survey of India, Western Circle, for the year ending 31st March 1907*, Bombay, 1907.

PART III.
SIROHI STATE.

SIROHI STATE.

CHAPTER I.

PHYSICAL ASPECTS.

Sirohi is situated in the south-west of Rājputāna between the parallels of 24° 20' and 25° 17' north latitude and 72° 16' and 73° 10' east longitude; it has an area of 1,964* square miles, and is thus, in regard to size, eleventh among the twenty States and chiefships of the Province. It is bounded on the north-east, north and west by Jodhpur; on the south by Pālanpur and Dānta; on the south-east by Idar; and on the east by Udaipur; its greatest length from north to south is nearly sixty-four miles, and its greatest breadth from east to west about fifty miles. In shape it is an irregular triangle, with the apex near the village of Harji in the extreme north and the base extending west by north-west from where the territories of Dānta, Idar and Sirohi meet to a spot about twenty-four miles north of Deesa.

Position,
area,
boundaries,
etc.

The State is called after its capital, the town of Sirohi, and the latter is said to take its name from the Saranwa hill, on the western slope of which it stands. Tod, in his *Travels in Western India*, has suggested that the name of the territory might be derived from its position at the head (*sir*) of the desert (*rohi*).

Origin o
name.

The country is much broken up by hills and rocky ranges. The main feature is the almost isolated mountain of Abu, the highest peak of which, Gurū Sikhar, rises 5,650 feet above sea-level; it is situated near the southern border, and is separated by a narrow pass from an adjacent range of lower hills, which runs in a north-easterly direction almost as far as the cantonment of Erinpura, and divides the State into two not very unequal parts. The western half is comparatively open and level, and consequently more populous and better cultivated than the other. Both portions, being situated at the foot of this central range of hills, are intersected by numerous watercourses (*nālas*), which become torrents of greater or less volume in the rainy season but are dry during the remainder of the year. From the line of water-parting the streams discharge into the Lāni and western Banās rivers. The Arāvalli hills form a wall on the east, and between them and the Abu-Sirohi range is a narrow valley (from 1,000 to 1,200 feet above the sea), through which runs the main line of the Rājputāna-Mélawā Railway. The lower slopes of the Arāvalli are clothed with fairly dense forest, and the country

Configura-
tion.

* This is the area as calculated in the Surveyor General's office by planimeter from the standard maps; the local authorities say the area is about 2,000 square miles.

generally is dotted with low rocky hills which, as a rule, are thickly covered with jungle, consisting chiefly of the *dhao* tree (*Anogeissus latifolia*) mixed with *khair* (*Acacia catechu*), *babūl* (*A. arabica*), *ber* (*Zizyphus jujuba*), etc.

The Arāvallis need no lengthy description as, with the exception of the Belkar peak (3,599 feet above the sea), only the lower skirts and outlying spurs of this range are situated within Sirohi limits. As they approach the south-eastern corner of the State, they spread out over the tract known as the Bhākar, which consists of successive ranges of steep and rugged hills of no great height. This part of the country was formerly notorious as a refuge for marauders and outlaws, and is still inhabited by wild Girāsias and Bhils who have caused much damage to the forests by felling and burning trees, preparatory to practising that peculiar system of agriculture styled *wālar* or *wālra*. Mount Abu is noticed in a separate article in Chapter VI below, and it will suffice here to state that it and the Sirohi range may, together with the numerous adjacent hills, be considered as outposts of the Arāvallis. Gurū Sikhar, the highest point between the Himālayas and the Nilgiris, is situated towards the northern end of Abu, while the principal peaks of the Sirohi range vary in height from 2,000 to 2,500 feet above the sea. From the north-western spurs of the group last mentioned a line of detached hills branches off in a northerly direction to the Jodhpur border, and ends in the Māl Pabār (2,737 feet). To the south-west of Abu several ranges extend for some distance into Pālanpur, and among these, Chotila (2,755 feet) and, just beyond it, Jai Rāj (3,575 feet) are the most prominent eminences; both form the boundary between Sirohi and Pālanpur. Westward of Abu, in the south-west corner of the State, are the Nandwār or Nandwāna hills, generally known as the Nibaj hills, which attain an altitude of 3,277 feet, while numerous detached peaks and groups are to be found further to the north.

The only river of any importance is the western Banās which, rising on the eastern slope of the hills behind the town of Sirohi, flows for ten miles in a south-easterly direction as far as Jhārol (near Pindwāra) and then, turning to the south-west, continues its course for another forty miles or so through the valley between Mount Abu and the Arāvallis till it enters Pālanpur-territory a little below the village of Māwal; it eventually loses itself in the sand at the head of the Rann of Cutch. Within Sirohi limits, the western Banās is not perennial, and usually ceases to flow about the middle of the cold weather, leaving pools of water here and there. The bed is sandy and rocky, and the banks, though never high, are often shelving. Like all mountain torrents, the river is subject to occasional floods, but these soon subside, leaving the stream fordable and the water clear and good. Near Abu Road it is crossed by a fine bridge of seventeen spans of thirty-five feet, which was constructed between 1887 and 1889 at a cost of about a lakh of rupees, contributed partly by the Government of India and partly by the Native States whose interests were mostly concerned.

Many streams carry the drainage of the hills on either side into the western Banās, but its most important tributary is the Sukli which has two branches, the western and eastern. The former rises in the hills near Dāntrai, and flows first south-east and next south by south-west for about fourteen miles till it joins the eastern branch near Jāwāl; it generally contains water throughout the year, though in no great volume. The eastern branch comes from the Sanwāra hills and the north-western slopes of Abu, and has a length of about twenty-five miles as far as Jāwāl; after leaving Anādra, it becomes quite a broad river with high banks, but its bed is usually dry soon after the rains. The united streams, under the name of Sīpu, continue in a south-easterly direction till they fall into the western Banās near Chhota Rānpur in the Pālanpur State.

Suk

Of the numerous other rivers and streams, the more important are found in the north and west, and all of them flow north-west into Jodhpur and eventually join the Lūni.

Other rivers.

The largest and longest is the Jawai, which rises in the Arāvallis near the base of the Belkar peak and passes close to the cantonment of Erinpura on the north-eastern border; but only eight miles lie in or along the borders of Sirohi, and it is almost entirely a river of Jodhpur.

Jawai.

The Sukri has its source in the hills south of Nāna, and, after flowing for about nine miles through Jodhpur territory, enters Sirohi; it has a total length of twenty-nine miles, joins the Jawai just beyond the northern frontier, and, with its tributaries, drains an area of about 210 square miles.

Sukri.

The various *nālas* which form the Khāri rise on the western slopes of the hills north of Sirohi town, and unite about seven miles from their source at the village of Ora; thence the river continues in a north-westerly direction for another nine miles when, on being joined on the left bank by the Krishnaotī, it passes into Jodhpur and, some thirty miles lower down, falls into the Jawai (or Sukri, as it is sometimes called). The Khāri drains an area of about 130 square miles in the Sirohi State, and there is an excellent site for a storage reservoir at Ora.

Khāri.

Further to the south-west are the Kachmaoli (an unimportant tributary of the Khāri) and the Kapalgangā; the latter rises in the Sanwāra plateau and, after a north-westerly course of twenty miles, enters Jodhpur and soon after joins the river called the Sukri, which should not be confused with either of the two of the same name mentioned above.

Minor streams.

No natural lakes exist, but there are traces of old artificial ones at Garh (in the east) and at other places. Speaking generally, the subsoil appears unsuitable for the artificial storage of water. Of existing lakes and tanks, the picturesque Nakhi Talao on Abu holds pride of place; it is described in Chapter VI. At the foot of the Abu hill and eight miles west of Abu Road is Chandela, an old reservoir which was enlarged and improved during the last famine and is capable of irrigating 675 acres, while to the north-east near Pindwāra is

Lakes.

a tank, constructed in honour of the diamond jubilee of Her late Majesty; it has a catchment area of seven square miles and a capacity of fifty-six million cubic feet (or sufficient for 560 acres), but, though it fills easily every year, all the water unfortunately disappears in a few weeks in consequence of leakage between the two dams. In addition to the above, there are two or three tanks at or near the capital, but they are not used for irrigation.

The whole of Sirohi is occupied by schists and gneisses belonging to the Arāvalli system, traversed by dykes of granite. Mount Abu is formed of a highly felspathic, massive and crystalline gneiss with a few schistose beds. Traces of gold were found in some ferruginous bands of quartzose schist near Rohera railway station in 1897, and the remains of old workings, which do not appear to have been more than prospecting trenches, are to be seen in the neighbourhood.

A considerable portion of the State is covered with trees and bush jungle. The prevailing tree is the smaller *dhao* (*Anogeissus latifolia*), which is found on most of the low rocky hills scattered over the country; when thus situated, it attains to no size and, from its irregular growth and branching habits, is of little use except for firewood, but in more favourable places, such as the lower slopes of Abu, it reaches a fair size, and its wood, being tough, is used for carts and agricultural implements. In the immediate neighbourhood of the villages such trees as the *nīm* (*Azadirachta indica*), the *pīpal* (*Ficus religiosa*), the *bar* (*F. bengalensis*), the *gūlar* (*F. glomerata*), the *ber* (*Zizyphus jujuba*) and the tamarisk (*Tamarix dioica*) are common. The bush jungle, which covers three-fourths of the plain country, consists chiefly of a second species of *ber* (*Zizyphus nummularia*), the *anwal* (*Cassia auriculata*), and the *lhair* (*Acacia catechu*), together with *lhejrā* (*Prosopis spicijera*), *babul* (*Acacia arabica*), *jhāl* or *pīlu* (*Salvadora persica* and *S. oleoides*), and *karel* (*Cupparis aphylla*). The *thor* (*Euphorbia nerifolia*) is found generally throughout Sirohi, especially on the hills round the base of Abu; and in other parts, where the soil is deep and good, there are numbers of the *dhāk* tree (*Butea frondosa*), the bark from the roots of which, owing to its durability under water, is much used in making ropes for the water-pots of Persian wheels.

On the slopes and round the base of Abu the forests contain a great variety of trees and shrubs. Among the most common are the bamboo (*Dendrocalamus strictus*); the *ām* or mango (*Mangifera indica*); two or three species of *dhao* (*Anogeissus latifolia* and *pendula*, etc.); the *bel* (*Egle marmelos*); the *haldu* (*Adina cordifolia*); the *siris* (*Albizzia Lebbek*); the *jāmūn* (*Eugenia jambolana*); the *kachnār* (*Bauhinia purpurea*); the *tīmrū* (*Diospyros tomentosa*); the *semal* (*Bombax malabaricum*); the *dhāman* (*Grewia oppositifolia*); the *rohīra* (*Tecoma undulata*); the *phālūdā* (*Erythrina arborescens*); the *aonla* (*Phyllanthus emblica*); and the horse-radish tree (*Moringa concanensis*). The flora of Mount Abu itself is dealt with in Chapter VI. below, and includes several plants and shrubs which could not exist in the dry hot plains.

